# SAFETY DATA SHEET

InterPlay C-terminal Mammalian TAP Vectors, Part Number 240102

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Part no. (chemical kit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterPlay C-terminal Mammalian TAP Vectors, Part Number 240102</td>
<td>240102</td>
</tr>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>240102-51</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>240102-52</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>240102-53</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>240101-55</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>240101-54</td>
</tr>
</tbody>
</table>

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Material uses**: Analytical reagent.

<table>
<thead>
<tr>
<th>Material uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
</tr>
</tbody>
</table>

### 1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

**e-mail address of person responsible for this SDS**: pdl-msds_author@agilent.com

### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)**: CHEMTREC®: +(44)-870-8200418

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Product definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
</tr>
</tbody>
</table>

**Date of issue/Date of revision**: 21/08/2019
**Date of previous issue**: 26/05/2017
**Version**: 2
InterPlay C-terminal Mammalian TAP Vectors, Part Number 240102

SECTION 2: Hazards identification

Expression Control Vector

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : pCTAP-A Expression Vector
No signal word.

: pCTAP-B Expression Vector
No signal word.

: pCTAP-C Expression Vector
No signal word.

: pNTAP-Mef2a Expression Control Vector
No signal word.

: pCMV-Tag2-Mef2c Expression Control Vector
No signal word.

Hazard statements : pCTAP-A Expression Vector
No known significant effects or critical hazards.

: pCTAP-B Expression Vector
No known significant effects or critical hazards.

: pCTAP-C Expression Vector
No known significant effects or critical hazards.

: pNTAP-Mef2a Expression Control Vector
No known significant effects or critical hazards.

: pCMV-Tag2-Mef2c Expression Control Vector
No known significant effects or critical hazards.

Precautionary statements

Prevention : pCTAP-A Expression Vector
Not applicable.

: pCTAP-B Expression Vector
Not applicable.

: pCTAP-C Expression Vector
Not applicable.

: pNTAP-Mef2a Expression Control Vector
Not applicable.

: pCMV-Tag2-Mef2c Expression Control Vector
Not applicable.

Response : pCTAP-A Expression Vector
Not applicable.

: pCTAP-B Expression Vector
Not applicable.

: pCTAP-C Expression Vector
Not applicable.

: pNTAP-Mef2a Expression Control Vector
Not applicable.

: pCMV-Tag2-Mef2c Expression Control Vector
Not applicable.
InterPlay C-terminal Mammalian TAP Vectors, Part Number 240102

SECTION 2: Hazards identification

<table>
<thead>
<tr>
<th>Storage</th>
<th>pCTAP-A Expression Vector</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Disposal</td>
<td>pCTAP-A Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Supplemental label elements</td>
<td>pCTAP-A Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</td>
<td>pCTAP-A Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Special packaging requirements</td>
<td>pCTAP-A Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
SECTION 2: Hazards identification

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII:

- pCTAP-A Expression Vector
- pCTAP-B Expression Vector
- pCTAP-C Expression Vector
- pNTAP-Mef2a Expression Control Vector
- pCMV-Tag2-Mef2c Expression Control Vector

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification:

- pCTAP-A Expression Vector
- pCTAP-B Expression Vector
- pCTAP-C Expression Vector
- pNTAP-Mef2a Expression Control Vector
- pCMV-Tag2-Mef2c Expression Control Vector

None known.

SECTION 3: Composition/information on ingredients

3.1 Substances:

- pCTAP-A Expression Vector Mixture
- pCTAP-B Expression Vector Mixture
- pCTAP-C Expression Vector Mixture
- pNTAP-Mef2a Expression Control Vector Mixture
- pCMV-Tag2-Mef2c Expression Control Vector Mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures:

Eye contact:

- pCTAP-A Expression Vector: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- pCTAP-B Expression Vector: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- pCTAP-C Expression Vector: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- pNTAP-Mef2a Expression Control Vector: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- pCMV-Tag2-Mef2c Expression Control Vector: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SECTION 4: First aid measures

**Inhalation**

- pCTAP-A Expression Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pCTAP-B Expression Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pCTAP-C Expression Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pNTAP-Mef2a Expression Control Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- pCMV-Tag2-Mef2c Expression Control Vector: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**

- pCTAP-A Expression Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pCTAP-B Expression Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pCTAP-C Expression Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pNTAP-Mef2a Expression Control Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- pCMV-Tag2-Mef2c Expression Control Vector: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion**

- pCTAP-A Expression Vector: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- pCTAP-B Expression Vector: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- pCTAP-C Expression Vector: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- pNTAP-Mef2a Expression Control Vector: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- pCMV-Tag2-Mef2c Expression Control Vector: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
### Protection of first-aiders

<table>
<thead>
<tr>
<th>Expression Vector</th>
<th>Protection措施</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
</tbody>
</table>

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Expression Vector</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>pCTAP-A Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>pCTAP-A Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>pCTAP-A Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>pCTAP-A Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

Expression Control Vector

Over-exposure signs/symptoms

Eye contact:
- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

Inhalation:
- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

Skin contact:
- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

Ingestion:
- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:
- pCTAP-A Expression Vector: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- pCTAP-B Expression Vector: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- pCTAP-C Expression Vector: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- pNTAP-Mef2a Expression Control Vector: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
### SECTION 4: First aid measures

<table>
<thead>
<tr>
<th>Vector</th>
<th>Specific treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No specific treatment.</td>
</tr>
</tbody>
</table>

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unsuitable extinguishing media</th>
<th>Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>None known.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>None known.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>None known.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>None known.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>None known.</td>
</tr>
</tbody>
</table>

#### 5.2 Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Hazards from the substance or mixture</th>
<th>Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
</tbody>
</table>
## SECTION 5: Firefighting measures

<table>
<thead>
<tr>
<th>Hazardous combustion products</th>
<th>pCTAP-A Expression Vector</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

### 5.3 Advice for firefighters

#### Special precautions for fire-fighters

<table>
<thead>
<tr>
<th>pCTAP-A Expression Vector</th>
<th>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
</tbody>
</table>

#### Special protective equipment for firefighters

<table>
<thead>
<tr>
<th>pCTAP-A Expression Vector</th>
<th>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</td>
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</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.</td>
</tr>
</tbody>
</table>
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

- pCTAP-A Expression Vector: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

- pCTAP-B Expression Vector: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

- pCTAP-C Expression Vector: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

- pNTAP-Mef2a Expression Control Vector: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

- pCMV-Tag2-Mef2c Expression Control Vector: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders:

- pCTAP-A Expression Vector: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- pCTAP-B Expression Vector: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- pCTAP-C Expression Vector: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- pNTAP-Mef2a Expression Control Vector: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- pCMV-Tag2-Mef2c Expression Control Vector: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions:

- pCTAP-A Expression Vector: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

- pCTAP-B Expression Vector: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

- pCTAP-C Expression Vector: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

- pNTAP-Mef2a Expression Control: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
InterPlay C-terminal Mammalian TAP Vectors, Part Number 240102

SECTION 6: Accidental release measures

Vector authorities if the product has caused environmental pollution (sewers, waterways, soil or air).


6.3 Methods and material for containment and cleaning up

Methods for cleaning up:

- **pCMV-Tag2-Mef2c Expression Control Vector**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- **pCTAP-A Expression Vector**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- **pCTAP-B Expression Vector**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- **pCTAP-C Expression Vector**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- **pNTAP-Mef2a Expression Control Vector**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- **pCMV-Tag2-Mef2c Expression Control Vector**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections:

- See Section 1 for emergency contact information.
- See Section 8 for information on appropriate personal protective equipment.
- See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:

- **pCTAP-A Expression Vector**: Put on appropriate personal protective equipment (see Section 8).
- **pCTAP-B Expression Vector**: Put on appropriate personal protective equipment (see Section 8).
- **pCTAP-C Expression Vector**: Put on appropriate personal protective equipment (see Section 8).
- **pNTAP-Mef2a Expression Control Vector**: Put on appropriate personal protective equipment (see Section 8).
- **pCMV-Tag2-Mef2c Expression Control Vector**: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene:

- **pCTAP-A Expression Vector**: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- **pCTAP-B Expression Vector**: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

<table>
<thead>
<tr>
<th>Expression Vector</th>
<th>Storage Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
</tbody>
</table>
SECTION 7: Handling and storage

7.3 Specific end use(s)

Recommendations:
- pCTAP-A Expression Vector: Industrial applications, Professional applications.
- pCTAP-B Expression Vector: Industrial applications, Professional applications.
- pCTAP-C Expression Vector: Industrial applications, Professional applications.
- pNTAP-Mef2a Expression Control Vector: Industrial applications, Professional applications.
- pCMV-Tag2-Mef2c Expression Control Vector: Industrial applications, Professional applications.

Industrial sector specific solutions:
- pCTAP-A Expression Vector: Not applicable.
- pCTAP-B Expression Vector: Not applicable.
- pCTAP-C Expression Vector: Not applicable.
- pNTAP-Mef2a Expression Control Vector: Not applicable.
- pCMV-Tag2-Mef2c Expression Control Vector: Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:
No exposure limit value known.

Recommended monitoring procedures:
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs:
No DNELs/DMELs available.
**SECTION 8: Exposure controls/personal protection**

**PNECs**

No PNECs available

**8.2 Exposure controls**

**Appropriate engineering controls**

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

**Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**

**Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Appearance**

**Physical state**

: pCTAP-B Expression Vector: Liquid.
: pCTAP-C Expression Vector: Liquid.
: pNTAP-Mef2a Expression Control Vector: Liquid.
: pCMV-Tag2-Mef2c Expression Control Vector: Liquid.
SECTION 9: Physical and chemical properties

**Colour**

- pCTAP-A Expression Vector: Not available.
- pCTAP-B Expression Vector: Not available.
- pCTAP-C Expression Vector: Not available.
- pNTAP-Mef2a Expression Control Vector: Not available.
- pCMV-Tag2-Mef2c Expression Control Vector: Not available.

**Odour**

- pCTAP-A Expression Vector: Not available.
- pCTAP-B Expression Vector: Not available.
- pCTAP-C Expression Vector: Not available.
- pNTAP-Mef2a Expression Control Vector: Not available.
- pCMV-Tag2-Mef2c Expression Control Vector: Not available.

**Odour threshold**

- pCTAP-A Expression Vector: Not available.
- pCTAP-B Expression Vector: Not available.
- pCTAP-C Expression Vector: Not available.
- pNTAP-Mef2a Expression Control Vector: Not available.
- pCMV-Tag2-Mef2c Expression Control Vector: Not available.

**pH**

- pCTAP-A Expression Vector: 7.5
- pCTAP-B Expression Vector: 7.5
- pCTAP-C Expression Vector: 7.5
- pNTAP-Mef2a Expression Control Vector: 7.5
- pCMV-Tag2-Mef2c Expression Control Vector: 7.5

**Melting point/freezing point**

- pCTAP-A Expression Vector: 0°C
- pCTAP-B Expression Vector: 0°C
- pCTAP-C Expression Vector: 0°C
- pNTAP-Mef2a Expression Control Vector: 0°C
- pCMV-Tag2-Mef2c Expression Control Vector: 0°C
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>pCTAP-A Expression Vector</th>
<th>pCTAP-B Expression Vector</th>
<th>pCTAP-C Expression Vector</th>
<th>pNTAP-Mef2a Expression Control Vector</th>
<th>pCMV-Tag2-Mef2c Expression Control Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100°C</td>
<td>100°C</td>
<td>100°C</td>
<td>100°C</td>
<td>100°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Date of issue/Date of revision:** 21/08/2019
**Date of previous issue:** 26/05/2017
**Version:** 2
### SECTION 9: Physical and chemical properties

#### Vapour pressure

<table>
<thead>
<tr>
<th>Vector Name</th>
<th>Property Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### Vapour density

<table>
<thead>
<tr>
<th>Vector Name</th>
<th>Property Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### Relative density

<table>
<thead>
<tr>
<th>Vector Name</th>
<th>Property Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### Solubility(ies)

<table>
<thead>
<tr>
<th>Vector Name</th>
<th>Property Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
</tbody>
</table>

#### Partition coefficient: n-octanol/water

<table>
<thead>
<tr>
<th>Vector Name</th>
<th>Property Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Not available.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
### SECTION 9: Physical and chemical properties

#### Auto-ignition temperature
- **pCTAP-A Expression Vector**: Not available.
- **pCTAP-B Expression Vector**: Not available.
- **pCTAP-C Expression Vector**: Not available.
- **pNTAP-Mef2a Expression Control Vector**: Not available.
- **pCMV-Tag2-Mef2c Expression Control Vector**: Not available.

#### Decomposition temperature
- **pCTAP-A Expression Vector**: Not available.
- **pCTAP-B Expression Vector**: Not available.
- **pCTAP-C Expression Vector**: Not available.
- **pNTAP-Mef2a Expression Control Vector**: Not available.
- **pCMV-Tag2-Mef2c Expression Control Vector**: Not available.

#### Viscosity
- **pCTAP-A Expression Vector**: Not available.
- **pCTAP-B Expression Vector**: Not available.
- **pCTAP-C Expression Vector**: Not available.
- **pNTAP-Mef2a Expression Control Vector**: Not available.
- **pCMV-Tag2-Mef2c Expression Control Vector**: Not available.

#### Explosive properties
- **pCTAP-A Expression Vector**: Not available.
- **pCTAP-B Expression Vector**: Not available.
- **pCTAP-C Expression Vector**: Not available.
- **pNTAP-Mef2a Expression Control Vector**: Not available.
- **pCMV-Tag2-Mef2c Expression Control Vector**: Not available.

#### Oxidising properties
- **pCTAP-A Expression Vector**: Not available.
- **pCTAP-B Expression Vector**: Not available.
- **pCTAP-C Expression Vector**: Not available.
- **pNTAP-Mef2a Expression Control Vector**: Not available.
- **pCMV-Tag2-Mef2c Expression Control Vector**: Not available.
### SECTION 9: Physical and chemical properties

**9.2 Other information**

No additional information.

### SECTION 10: Stability and reactivity

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Vector Type</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1 Reactivity</td>
<td>pCTAP-A Expression Vector</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>10.2 Chemical stability</td>
<td>pCTAP-A Expression Vector</td>
<td>The product is stable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>The product is stable.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>The product is stable.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>The product is stable.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>10.3 Possibility of hazardous reactions</td>
<td>pCTAP-A Expression Vector</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>10.4 Conditions to avoid</td>
<td>pCTAP-A Expression Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-B Expression Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pCTAP-C Expression Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>
## SECTION 10: Stability and reactivity

### 10.5 Incompatible materials

<table>
<thead>
<tr>
<th>Expression Vector</th>
<th>Incompatible with oxidising materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
</tbody>
</table>

### 10.6 Hazardous decomposition products

<table>
<thead>
<tr>
<th>Expression Vector</th>
<th>Hazardous decomposition products</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCTAP-A Expression Vector</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>pCTAP-B Expression Vector</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>pCTAP-C Expression Vector</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>pNTAP-Mef2a Expression Control Vector</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>pCMV-Tag2-Mef2c Expression Control Vector</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
- Not available.

**Acute toxicity estimates**
- N/A

**Irritation/Corrosion**
- Conclusion/Summary: Not available.

**Sensitiser**
- Conclusion/Summary: Not available.

**Mutagenicity**
- Conclusion/Summary: Not available.

**Carcinogenicity**
- Conclusion/Summary: Not available.

**Reproductive toxicity**
- Conclusion/Summary: Not available.

**Teratogenicity**
- Conclusion/Summary: Not available.

**Specific target organ toxicity (single exposure)**
- Not available.

**Specific target organ toxicity (repeated exposure)**
- Not available.

**Aspiration hazard**
- Not available.
SECTION 11: Toxicological information

Information on likely routes of exposure:

**Potential acute health effects**

**Inhalation**:
- pCTAP-A Expression Vector: No known significant effects or critical hazards.
- pCTAP-B Expression Vector: No known significant effects or critical hazards.
- pCTAP-C Expression Vector: No known significant effects or critical hazards.
- pNTAP-Mef2a Expression Control Vector: No known significant effects or critical hazards.
- pCMV-Tag2-Mef2c Expression Control Vector: No known significant effects or critical hazards.

**Ingestion**:
- pCTAP-A Expression Vector: No known significant effects or critical hazards.
- pCTAP-B Expression Vector: No known significant effects or critical hazards.
- pCTAP-C Expression Vector: No known significant effects or critical hazards.
- pNTAP-Mef2a Expression Control Vector: No known significant effects or critical hazards.
- pCMV-Tag2-Mef2c Expression Control Vector: No known significant effects or critical hazards.

**Skin contact**:
- pCTAP-A Expression Vector: No known significant effects or critical hazards.
- pCTAP-B Expression Vector: No known significant effects or critical hazards.
- pCTAP-C Expression Vector: No known significant effects or critical hazards.
- pNTAP-Mef2a Expression Control Vector: No known significant effects or critical hazards.
- pCMV-Tag2-Mef2c Expression Control Vector: No known significant effects or critical hazards.

**Eye contact**:
- pCTAP-A Expression Vector: No known significant effects or critical hazards.
- pCTAP-B Expression Vector: No known significant effects or critical hazards.
- pCTAP-C Expression Vector: No known significant effects or critical hazards.
- pNTAP-Mef2a Expression Control Vector: No known significant effects or critical hazards.
- pCMV-Tag2-Mef2c Expression Control Vector: No known significant effects or critical hazards.
SECTION 11: Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation**

- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

**Ingestion**

- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

**Skin contact**

- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

**Eye contact**

- pCTAP-A Expression Vector: No specific data.
- pCTAP-B Expression Vector: No specific data.
- pCTAP-C Expression Vector: No specific data.
- pNTAP-Mef2a Expression Control Vector: No specific data.
- pCMV-Tag2-Mef2c Expression Control Vector: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure**

- Potential immediate effects: Not available.
- Potential delayed effects: Not available.

**Long term exposure**

- Potential immediate effects: Not available.
### SECTION 11: Toxicological information

#### Potential chronic health effects

**General:** No known significant effects or critical hazards.

- **pCTAP-A Expression Vector**
- **pCTAP-B Expression Vector**
- **pCTAP-C Expression Vector**
- **pNTAP-Mef2a Expression Control Vector**
- **pCMV-Tag2-Mef2c Expression Control Vector**

**Carcinogenicity:** No known significant effects or critical hazards.

- **pCTAP-A Expression Vector**
- **pCTAP-B Expression Vector**
- **pCTAP-C Expression Vector**
- **pNTAP-Mef2a Expression Control Vector**
- **pCMV-Tag2-Mef2c Expression Control Vector**

**Mutagenicity:** No known significant effects or critical hazards.

- **pCTAP-A Expression Vector**
- **pCTAP-B Expression Vector**
- **pCTAP-C Expression Vector**
- **pNTAP-Mef2a Expression Control Vector**
- **pCMV-Tag2-Mef2c Expression Control Vector**

**Teratogenicity:** No known significant effects or critical hazards.

- **pCTAP-A Expression Vector**
- **pCTAP-B Expression Vector**
- **pCTAP-C Expression Vector**
- **pNTAP-Mef2a Expression Control Vector**
- **pCMV-Tag2-Mef2c Expression Control Vector**

**Developmental effects:** No known significant effects or critical hazards.

- **pCTAP-A Expression Vector**
- **pCTAP-B Expression Vector**
- **pCTAP-C Expression Vector**
- **pNTAP-Mef2a Expression Control Vector**
- **pCMV-Tag2-Mef2c Vector**

**Potential delayed effects:** Not available.
SECTION 11: Toxicological information

Expression Control Vector

Fertility effects:
- pCTAP-A Expression Vector: No known significant effects or critical hazards.
- pCTAP-B Expression Vector: No known significant effects or critical hazards.
- pCTAP-C Expression Vector: No known significant effects or critical hazards.
- pNTAP-Mef2a Expression Control Vector: No known significant effects or critical hazards.
- pCMV-Tag2-Mef2c Expression Control Vector: No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity
Conclusion/Summary: Not available.

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil
- Soil/water partition coefficient (KOC): Not available.
- Mobility: Not available.

12.5 Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging
Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
SECTION 14: Transport information

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<th></th>
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<th>IATA</th>
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<tr>
<td>14.2 UN proper shipping name</td>
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</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
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<tr>
<td>14.4 Packing group</td>
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<td>-</td>
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</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

Additional information

14.6 Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

None of the components are listed.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.
SECTION 15: Regulatory information

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

Australia : Not determined.
Canada : Not determined.
China : All components are listed or exempted.
Europe : All components are listed or exempted.
Japan :
  Japan inventory (ENCS): Not determined.
  Japan inventory (ISHL): All components are listed or exempted.
New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : All components are listed or exempted.
Thailand : Not determined.
Turkey : Not determined.
United States : All components are listed or exempted.
Viet Nam : Not determined.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
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</tbody>
</table>

Full text of abbreviated H statements
Not applicable.

Full text of classifications [CLP/GHS]
Not applicable.
### SECTION 16: Other information

| Date of issue/Date of revision | 21/08/2019 |
| Date of previous issue         | 26/05/2017 |
| Version                        | 2          |

**Notice to reader**

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