

# SAFETY DATA SHEET



Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

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

### 1.1 Product identifier

<b>Product name</b>	: Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602
<b>Part No. (Kit)</b>	: 300602
<b>Part No.</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l 300600-13
	Alien Probe Forward Primer 300602-51
	Alien Probe Reverse Primer 300602-52
	Alien Probe (FAM) 300602-53

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

Identified uses	
Analytical reagent.	
Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	0.02 ml (20 $\mu$ l)
Alien Probe Forward Primer	0.1 ml (2.5 $\mu$ M 100 $\mu$ l)
Alien Probe Reverse Primer	0.1 ml (2.5 $\mu$ M 100 $\mu$ l)
Alien Probe (FAM)	0.1 ml (4 $\mu$ M 100 $\mu$ l)

### 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

<b>Product definition</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Mixture
	Alien Probe Forward Primer	Mixture
	Alien Probe Reverse Primer	Mixture
	Alien Probe (FAM)	Mixture

#### 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.

**Date of issue/Date of revision** : 21/12/2017

1/20

## SECTION 2: Hazards identification

### 2.2 Label elements

<b>Signal word</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No signal word. No signal word. No signal word. No signal word.
<b>Hazard statements</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Precautionary statements</b>		
<b>Prevention</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Response</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.

### Special packaging requirements

Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 2: Hazards identification

<b>Tactile warning of danger</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Not applicable.
	Alien Probe Forward Primer	Not applicable.
	Alien Probe Reverse Primer	Not applicable.
	Alien Probe (FAM)	Not applicable.

### 2.3 Other hazards

<b>Other hazards which do not result in classification</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	None known.
	Alien Probe Forward Primer	None known.
	Alien Probe Reverse Primer	None known.
	Alien Probe (FAM)	None known.

## SECTION 3: Composition/information on ingredients

<b>3.1 Substances</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Mixture
	Alien Probe Forward Primer	Mixture
	Alien Probe Reverse Primer	Mixture
	Alien Probe (FAM)	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.

### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	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.
	Alien Probe Forward Primer	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.
	Alien Probe Reverse Primer	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.
	Alien Probe (FAM)	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.
<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Alien Probe Forward Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Alien Probe Reverse Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Date of issue/Date of revision** : 21/12/2017

## SECTION 4: First aid measures

	Alien Probe (FAM)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Alien Probe Forward Primer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Alien Probe Reverse Primer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Alien Probe (FAM)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	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.
	Alien Probe Forward Primer	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.
	Alien Probe Reverse Primer	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.
	Alien Probe (FAM)	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.
<b>Protection of first-aiders</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No action shall be taken involving any personal risk or without suitable training.
	Alien Probe Forward Primer	No action shall be taken involving any personal risk or without suitable training.
	Alien Probe Reverse Primer	No action shall be taken involving any personal risk or without suitable training.
	Alien Probe (FAM)	No action shall be taken involving any personal risk or without suitable training.

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

#### Potential acute health effects

<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.

## SECTION 4: First aid measures

<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.

### Over-exposure signs/symptoms

<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 4: First aid measures

<b>Notes to physician</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No specific treatment. No specific treatment. No specific treatment. No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	None known. None known. None known. None known.

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

<b>Hazards from the substance or mixture</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No specific data. No specific data. No specific data. No specific data.

### 5.3 Advice for firefighters

<b>Special precautions for fire-fighters</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l  Alien Probe Forward Primer  Alien Probe Reverse	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. 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. Promptly isolate the scene by removing all persons from the
--	---	---



Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 5: Firefighting measures

### Special protective equipment for fire-fighters

Primer	vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Alien Probe (FAM)	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.
: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	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.
Alien Probe Forward Primer	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.
Alien Probe Reverse Primer	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.
Alien Probe (FAM)	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.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	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.
Alien Probe Forward Primer	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.
Alien Probe Reverse Primer	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.
Alien Probe (FAM)	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

: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	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".
Alien Probe Forward Primer	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".

## SECTION 6: Accidental release measures

Alien Probe Reverse Primer	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".
Alien Probe (FAM)	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

: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	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).
Alien Probe Forward Primer	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).
Alien Probe Reverse Primer	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).
Alien Probe (FAM)	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).

### 6.3 Methods and material for containment and cleaning up

#### Methods for cleaning up

: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	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.
Alien Probe Forward Primer	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.
Alien Probe Reverse Primer	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.
Alien Probe (FAM)	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

<b>Protective measures</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Put on appropriate personal protective equipment (see Section 8).
	Alien Probe Forward Primer	Put on appropriate personal protective equipment (see Section 8).
	Alien Probe Reverse Primer	Put on appropriate personal protective equipment (see Section 8).
	Alien Probe (FAM)	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	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.
	Alien Probe Forward Primer	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.
	Alien Probe Reverse Primer	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.
	Alien Probe (FAM)	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.

### 7.2 Conditions for safe storage, including any incompatibilities

<b>Storage</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	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.
	Alien Probe Forward Primer	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.
	Alien Probe Reverse Primer	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

Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 7: Handling and storage

Alien Probe (FAM)	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. 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.
-------------------	---

### 7.3 Specific end use(s)

<b>Recommendations</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Industrial applications, Professional applications.
	Alien Probe Forward Primer	Industrial applications, Professional applications.
	Alien Probe Reverse Primer	Industrial applications, Professional applications.
	Alien Probe (FAM)	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Not applicable.
	Alien Probe Forward Primer	Not applicable.
	Alien Probe Reverse Primer	Not applicable.
	Alien Probe (FAM)	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.

#### PNECs

No PNECs available

### 8.2 Exposure controls

Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 8: Exposure controls/personal protection

**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

<b>Physical state</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Liquid.
	Alien Probe Forward Primer	Liquid.
	Alien Probe Reverse Primer	Liquid.
	Alien Probe (FAM)	Liquid.
<b>Colour</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Odour</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.

Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 9: Physical and chemical properties

<b>Odour threshold</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>pH</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	7.5
	Alien Probe Reverse Primer	7.5
	Alien Probe (FAM)	7.5
<b>Melting point/freezing point</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	0°C
	Alien Probe Forward Primer	0°C
	Alien Probe Reverse Primer	0°C
	Alien Probe (FAM)	0°C
<b>Initial boiling point and boiling range</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	100°C
	Alien Probe Forward Primer	100°C
	Alien Probe Reverse Primer	100°C
	Alien Probe (FAM)	100°C
<b>Flash point</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Evaporation rate</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Flammability (solid, gas)</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not applicable.
	Alien Probe Forward Primer	Not applicable.
	Alien Probe Reverse Primer	Not applicable.
	Alien Probe (FAM)	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.

## SECTION 9: Physical and chemical properties

<b>Vapour pressure</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Vapour density</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Relative density</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Solubility(ies)</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Easily soluble in the following materials: cold water and hot water.
	Alien Probe Forward Primer	Easily soluble in the following materials: cold water and hot water.
	Alien Probe Reverse Primer	Easily soluble in the following materials: cold water and hot water.
	Alien Probe (FAM)	Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Auto-ignition temperature</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Decomposition temperature</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Viscosity</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.

Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 9: Physical and chemical properties

<b>Explosive properties</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.
<b>Oxidising properties</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific test data related to reactivity available for this product or its ingredients.
	Alien Probe Forward Primer	No specific test data related to reactivity available for this product or its ingredients.
	Alien Probe Reverse Primer	No specific test data related to reactivity available for this product or its ingredients.
	Alien Probe (FAM)	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	The product is stable.
	Alien Probe Forward Primer	The product is stable.
	Alien Probe Reverse Primer	The product is stable.
	Alien Probe (FAM)	The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Under normal conditions of storage and use, hazardous reactions will not occur.
	Alien Probe Forward Primer	Under normal conditions of storage and use, hazardous reactions will not occur.
	Alien Probe Reverse Primer	Under normal conditions of storage and use, hazardous reactions will not occur.
	Alien Probe (FAM)	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.



Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 10: Stability and reactivity

**10.5 Incompatible materials** : Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l May react or be incompatible with oxidising materials.  
Alien Probe Forward Primer May react or be incompatible with oxidising materials.  
Alien Probe Reverse Primer May react or be incompatible with oxidising materials.  
Alien Probe (FAM) May react or be incompatible with oxidising materials.

**10.6 Hazardous decomposition products** : Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Alien Probe Forward Primer Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Alien Probe Reverse Primer Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Alien Probe (FAM) Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Not available.

#### Acute toxicity estimates

Not available.

#### Irritation/Corrosion

**Conclusion/Summary** : Not available.

#### Sensitiser

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Not available.  
Alien Probe Forward Primer Not available.  
Alien Probe Reverse Primer Not available.  
Alien Probe (FAM) Not available.

#### Potential acute health effects

**Inhalation** : Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l No known significant effects or critical hazards.  
Alien Probe Forward Primer No known significant effects or critical hazards.  
Alien Probe Reverse Primer No known significant effects or critical hazards.  
Alien Probe (FAM) No known significant effects or critical hazards.

## SECTION 11: Toxicological information

<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	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

## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

<b>General</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Developmental effects</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Fertility effects</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	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

**Date of issue/Date of revision** : 21/12/2017

Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602

## SECTION 12: Ecological information

Not available.

### 12.4 Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ ) : Not available.

Mobility : Not available.

### 12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

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 spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

ADR/RID / IMDG / IATA : Not regulated.

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.

Date of issue/Date of revision : 21/12/2017

18/20

## SECTION 15: Regulatory information

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l	Not applicable.
	: Alien Probe Forward Primer	Not applicable.
	: Alien Probe Reverse Primer	Not applicable.
	: Alien Probe (FAM)	Not applicable.

### 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.

#### 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

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

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

*Alien Reference RNA FAM QRT-PCR Detection Kit, Part Number 300602*

## 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]  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

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

Classification	Justification
Not classified.	

### Full text of abbreviated H statements

Not applicable.

### Full text of classifications [CLP/GHS]

Not applicable.

**Date of issue/ Date of revision** : 21/12/2017

**Date of previous issue** : No previous validation.

**Version** : 1

### Notice to reader

**Disclaimer:** The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.