

SAFETY DATA SHEET

PathDetect SRF cis Reporting System, Part Number 219081

Section 1. Identification

Product identifier : PathDetect SRF cis Reporting System, Part Number 219081

Part no. (chemical kit) : 219081

Part no. : pSRF-Luc Vector 219082-51
pFC-PKA Plasmid 219070-51

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

Identified uses : Analytical reagent.
 pSRF-Luc Vector 0.05 ml (50 µg 1 µg/µl)
 pFC-PKA Plasmid 0.2 ml (5 µg 25 ng/µl)

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

Emergency telephone number (with hours of operation) : CHEMTREC®: 1-800-424-9300

Section 2. Hazard identification

Classification of the substance or mixture

Not classified.

GHS label elements

| | | |
|--|--------------------------------------|--|
| Signal word | : pSRF-Luc Vector pFC-PKA Plasmid | No signal word. No signal word. |
| Hazard statements | : pSRF-Luc Vector pFC-PKA Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| <u>Precautionary statements</u> | | |
| Prevention | : pSRF-Luc Vector pFC-PKA Plasmid | Not applicable. Not applicable. |
| Response | : pSRF-Luc Vector pFC-PKA Plasmid | Not applicable. Not applicable. |
| Storage | : pSRF-Luc Vector pFC-PKA Plasmid | Not applicable. Not applicable. |
| Disposal | : pSRF-Luc Vector pFC-PKA Plasmid | Not applicable. Not applicable. |
| Supplemental label elements | : pSRF-Luc Vector pFC-PKA Plasmid | None known. None known. |
| Other hazards which do not result in classification | : pSRF-Luc Vector pFC-PKA Plasmid | None known. None known. |

Section 3. Composition/information on ingredients

Substance/mixture : pSRF-Luc Vector Mixture
pFC-PKA Plasmid Mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Section 4. First-aid measures

Description of necessary first aid measures

| | | |
|---------------------|-------------------|--|
| Eye contact | : pSRF-Luc 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. |
| | pFC-PKA Plasmid | 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. |
| Inhalation | : pSRF-Luc Vector | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| | pFC-PKA Plasmid | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | : pSRF-Luc Vector | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | pFC-PKA Plasmid | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | : pSRF-Luc Vector | Wash out mouth with water. 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. |
| | pFC-PKA Plasmid | Wash out mouth with water. 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. |

Most important symptoms/effects, acute and delayed

Potential acute health effects

| | | |
|---------------------|--------------------------------------|--|
| Eye contact | : pSRF-Luc Vector pFC-PKA Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Inhalation | : pSRF-Luc Vector pFC-PKA Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Skin contact | : pSRF-Luc Vector pFC-PKA Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Ingestion | : pSRF-Luc Vector pFC-PKA Plasmid | No known significant effects or critical hazards. No known significant effects or critical hazards. |

Over-exposure signs/symptoms

| | | |
|--------------------|--------------------------------------|--|
| Eye contact | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |
| Inhalation | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |

Section 4. First-aid measures

| | | |
|---------------------|--------------------------------------|--|
| Skin contact | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |
| Ingestion | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |

Indication of immediate medical attention and special treatment needed, if necessary

| | | |
|-----------------------------------|--|--|
| Notes to physician | : pSRF-Luc Vector pFC-PKA Plasmid | 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. |
| Specific treatments | : pSRF-Luc Vector pFC-PKA Plasmid | No specific treatment. No specific treatment. |
| Protection of first-aiders | : pSRF-Luc Vector pFC-PKA Plasmid | No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. |

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

| | | |
|---|--|--|
| Suitable extinguishing media | : pSRF-Luc Vector pFC-PKA Plasmid | Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : pSRF-Luc Vector pFC-PKA Plasmid | None known. None known. |
| Specific hazards arising from the chemical | : pSRF-Luc Vector pFC-PKA Plasmid | 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. |
| Hazardous thermal decomposition products | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |
| Special protective actions for fire-fighters | : pSRF-Luc Vector pFC-PKA Plasmid | 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. |
| Special protective equipment for fire-fighters | : pSRF-Luc Vector pFC-PKA Plasmid | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| | | |
|------------------------------------|-------------------|---|
| For non-emergency personnel | : pSRF-Luc 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 spilled material. Put on appropriate personal protective equipment. |
| | pFC-PKA Plasmid | 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 spilled material. Put on appropriate personal protective equipment. |
| For emergency responders | : pSRF-Luc Vector | If specialized 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". |
| | pFC-PKA Plasmid | If specialized 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". |
| Environmental precautions | : pSRF-Luc Vector | Avoid dispersal of spilled 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). |
| | pFC-PKA Plasmid | Avoid dispersal of spilled 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). |

Methods and materials for containment and cleaning up

| | | |
|--------------------------------|-------------------|---|
| Methods for cleaning up | : pSRF-Luc 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. |
| | pFC-PKA Plasmid | 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. |

Section 7. Handling and storage

Precautions for safe handling

| | | |
|----------------------------|-------------------|---|
| Protective measures | : pSRF-Luc Vector | Put on appropriate personal protective equipment (see Section 8). |
| | pFC-PKA Plasmid | Put on appropriate personal protective equipment (see Section 8). |

Section 7. Handling and storage

Advice on general occupational hygiene

: pSRF-Luc 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.

pFC-PKA Plasmid

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.

Conditions for safe storage, including any incompatibilities

: pSRF-Luc Vector

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

pFC-PKA Plasmid

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

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

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.

Individual protection measures

Section 8. Exposure controls/personal protection

- 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.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

| | | |
|--|--------------------------------------|------------------------------------|
| Physical state | : pSRF-Luc Vector pFC-PKA Plasmid | Liquid. Liquid. |
| Color | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. |
| Odor | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. |
| Odor threshold | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. |
| pH | : pSRF-Luc Vector pFC-PKA Plasmid | 7.5 7.5 |
| Melting point/freezing point | : pSRF-Luc Vector pFC-PKA Plasmid | 0°C (32°F) 0°C (32°F) |
| Boiling point, initial boiling point, and boiling range | : pSRF-Luc Vector pFC-PKA Plasmid | 100°C (212°F) 100°C (212°F) |
| Flash point | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. |
| Evaporation rate | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. |
| Flammability | : pSRF-Luc Vector pFC-PKA Plasmid | Not applicable. Not applicable. |
| Lower and upper explosion limit/flammability limit | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. |
| Vapor pressure | : | |

Section 9. Physical and chemical properties and safety characteristics

| | Ingredient name | Vapor Pressure at 20°C | | | Vapor pressure at 50°C | | |
|---|--|------------------------------------|-----|--------|------------------------|------|--------|
| | | mm Hg | kPa | Method | mm Hg | kPa | Method |
| | pSRF-Luc Vector | | | | | | |
| | water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| | pFC-PKA Plasmid | | | | | | |
| | water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| Relative vapor density | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. | | | | | |
| Relative density | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. | | | | | |
| Solubility(ies) | : Media | Result | | | | | |
| | pSRF-Luc Vector | | | | | | |
| | water | Soluble | | | | | |
| | pFC-PKA Plasmid | | | | | | |
| | water | Soluble | | | | | |
| Partition coefficient: n-octanol/water | : pSRF-Luc Vector pFC-PKA Plasmid | Not applicable. Not applicable. | | | | | |
| Auto-ignition temperature | : <input checked="" type="checkbox"/> Not available. | | | | | | |
| Decomposition temperature | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. | | | | | |
| Viscosity | : pSRF-Luc Vector pFC-PKA Plasmid | Not available. Not available. | | | | | |
| Particle characteristics | | | | | | | |
| Median particle size | : <input checked="" type="checkbox"/> pSRF-Luc Vector pFC-PKA Plasmid | Not applicable. Not applicable. | | | | | |

Section 10. Stability and reactivity

| | | |
|---|--------------------------------------|--|
| Reactivity | : pSRF-Luc Vector pFC-PKA Plasmid | No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : pSRF-Luc Vector pFC-PKA Plasmid | The product is stable. The product is stable. |
| Possibility of hazardous reactions | : pSRF-Luc Vector pFC-PKA Plasmid | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |
| Incompatible materials | : pSRF-Luc Vector pFC-PKA Plasmid | May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. |

Section 10. Stability and reactivity

| | | |
|---|-------------------|--|
| Hazardous decomposition products | : pSRF-Luc Vector | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| | pFC-PKA Plasmid | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

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.

| | | |
|---|-------------------|----------------|
| Information on the likely routes of exposure | : pSRF-Luc Vector | Not available. |
| | pFC-PKA Plasmid | Not available. |

Potential acute health effects

| | | |
|---------------------|-------------------|---|
| Eye contact | : pSRF-Luc Vector | No known significant effects or critical hazards. |
| | pFC-PKA Plasmid | No known significant effects or critical hazards. |
| Inhalation | : pSRF-Luc Vector | No known significant effects or critical hazards. |
| | pFC-PKA Plasmid | No known significant effects or critical hazards. |
| Skin contact | : pSRF-Luc Vector | No known significant effects or critical hazards. |
| | pFC-PKA Plasmid | No known significant effects or critical hazards. |
| Ingestion | : pSRF-Luc Vector | No known significant effects or critical hazards. |
| | pFC-PKA Plasmid | No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| | | |
|--------------------|-------------------|-------------------|
| Eye contact | : pSRF-Luc Vector | No specific data. |
| | pFC-PKA Plasmid | No specific data. |
| Inhalation | : pSRF-Luc Vector | No specific data. |
| | pFC-PKA Plasmid | No specific data. |

Section 11. Toxicological information

| | | |
|---------------------|--------------------------------------|--|
| Skin contact | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |
| Ingestion | : pSRF-Luc Vector pFC-PKA Plasmid | No specific data. No specific data. |

Delayed and immediate effects and also 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.

Potential delayed effects : Not available.

Potential chronic health effects

General : pSRF-Luc Vector
pFC-PKA Plasmid No known significant effects or critical hazards.
No known significant effects or critical hazards.

Carcinogenicity : pSRF-Luc Vector
pFC-PKA Plasmid No known significant effects or critical hazards.
No known significant effects or critical hazards.

Mutagenicity : pSRF-Luc Vector
pFC-PKA Plasmid No known significant effects or critical hazards.
No known significant effects or critical hazards.

Reproductive toxicity : pSRF-Luc Vector
pFC-PKA Plasmid No known significant effects or critical hazards.
No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

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

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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

TDG / IMDG / IATA : Not regulated.

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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

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

Canada : All components are listed or exempted.

United States : All components are active or exempted.

Section 16. Other information

History

Date of issue/Date of revision : 03/20/2024

Date of previous issue : 04/28/2021

Version : 7

Section 16. Other information

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- HPR = Hazardous Products Regulations
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- UN = United Nations

Procedure used to derive the classification

| Classification | Justification |
|-----------------|---------------|
| Not classified. | |

✔ Indicates information that has changed from previously issued version.

Notice to reader

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