

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

Analytical reagent.

pSRF-Luc Vector 0.05 mL (50 µg 1 µg/µl)
 pFC-PKA Plasmid 0.2 mL

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
 679 Springvale Road
 Mulgrave
 Victoria 3170, Australia
 1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: (61)-290372994

Section 2. Hazard(s) 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.
Precautionary statements		
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	Not applicable. Not applicable.
Other hazards which do not result in classification	: pSRF-Luc Vector pFC-PKA Plasmid	None known. None known.

Section 3. Composition and ingredient information

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

CAS number/other identifiers

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 and hence require reporting in this section.

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

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. 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.
	pFC-PKA Plasmid	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.

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

Section 4. First aid measures

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.
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. Firefighting 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 spilt 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 spilt material. Put on appropriate personal protective equipment.
For emergency responders	: pSRF-Luc 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".
	pFC-PKA Plasmid	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".
Environmental precautions	: pSRF-Luc 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).
	pFC-PKA Plasmid	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).

Methods and material 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

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

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.

Section 8. Exposure controls and personal protection

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

Appearance

- | | | |
|---|---|--|
| Physical state | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Liquid.
Liquid. |
| Colour | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Odour | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Odour threshold | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| pH | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | 7.5
7.5 |
| Melting point | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | 0°C (32°F)
0°C (32°F) |
| Boiling point | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | 100°C (212°F)
100°C (212°F) |
| Flash point | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Evaporation rate | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Flammability (solid, gas) | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not applicable.
Not applicable. |
| Lower and upper explosive (flammable) limits | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Vapour pressure | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Vapour density | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Relative density | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Solubility | : <input checked="" type="checkbox"/> SRF-Luc Vector

<input checked="" type="checkbox"/> pFC-PKA Plasmid | Easily soluble in the following materials: cold water and hot water.
Easily soluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/water | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Auto-ignition temperature | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |
| Decomposition temperature | : <input checked="" type="checkbox"/> SRF-Luc Vector
<input checked="" type="checkbox"/> pFC-PKA Plasmid | Not available.
Not available. |

Section 9. Physical and chemical properties

Viscosity : pSRF-Luc Vector Not available.
pFC-PKA Plasmid Not available.

Section 10. Stability and reactivity

Reactivity : pSRF-Luc Vector No specific test data related to reactivity available for this product or its ingredients.
pFC-PKA Plasmid No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : pSRF-Luc Vector The product is stable.
pFC-PKA Plasmid The product is stable.

Possibility of hazardous reactions : pSRF-Luc Vector Under normal conditions of storage and use, hazardous reactions will not occur.
pFC-PKA Plasmid Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : pSRF-Luc Vector No specific data.
pFC-PKA Plasmid No specific data.

Incompatible materials : pSRF-Luc Vector May react or be incompatible with oxidising materials.
pFC-PKA Plasmid May react or be incompatible with oxidising materials.

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.

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Section 11. Toxicological information

Aspiration hazard

Not available.

Information on 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.

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

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

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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

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

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

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

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

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

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 11. Toxicological information

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

Section 14. Transport information

Regulatory information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

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 Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Australia inventory (AICS) : All components are listed or exempted.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Section 15. Regulatory information

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.

International lists

National inventory

Canada	: All components are listed or exempted.
China	: <input checked="" type="checkbox"/> All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: <input checked="" type="checkbox"/> Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : Not determined.
Malaysia	: <input checked="" type="checkbox"/> Not determined.
New Zealand	: <input checked="" type="checkbox"/> All components are listed or exempted.
Philippines	: <input checked="" type="checkbox"/> All components are listed or exempted.
Republic of Korea	: <input checked="" type="checkbox"/> All components are listed or exempted.
Taiwan	: <input checked="" type="checkbox"/> All components are listed or exempted.
Turkey	: <input checked="" type="checkbox"/> Not determined.
United States	: All components are listed or exempted.

Section 16. Any other relevant information

History

Date of issue/Date of revision	: 30/09/2016
Date of previous issue	: 23/04/2013.
Version	: 4

Key to abbreviations	: ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals 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) NOHSC = National Occupational Health and Safety Commission SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations
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Procedure used to derive the classification

Classification	Justification
Not classified.	

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Any other relevant information

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.