

# 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 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 No signal word.  
 pFC-PKA Plasmid No signal word.  
**Hazard statements** : pSRF-Luc Vector No known significant effects or critical hazards.  
 pFC-PKA Plasmid No known significant effects or critical hazards.

### Precautionary statements

**Prevention** : pSRF-Luc Vector Not applicable.  
 pFC-PKA Plasmid Not applicable.  
**Response** : pSRF-Luc Vector Not applicable.  
 pFC-PKA Plasmid Not applicable.  
**Storage** : pSRF-Luc Vector Not applicable.  
 pFC-PKA Plasmid Not applicable.  
**Disposal** : pSRF-Luc Vector Not applicable.  
 pFC-PKA Plasmid Not applicable.

### Supplemental label elements

**Additional warning phrases** : pSRF-Luc Vector Not applicable.  
 pFC-PKA Plasmid Not applicable.

**Other hazards which do not result in classification** : pSRF-Luc Vector None known.  
 pFC-PKA Plasmid 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 and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: 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.
<b>Inhalation</b>	: 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.
<b>Skin contact</b>	: 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.
<b>Ingestion</b>	: 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

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

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: pSRF-Luc Vector pFC-PKA Plasmid	No specific data. No specific data.
<b>Inhalation</b>	: pSRF-Luc Vector pFC-PKA Plasmid	No specific data. No specific data.

## Section 4. First aid measures

<b>Skin contact</b>	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.
<b>Ingestion</b>	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.

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

<b>Notes to physician</b>	: pSRF-Luc Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	pFC-PKA Plasmid	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: pSRF-Luc Vector	No specific treatment.
	pFC-PKA Plasmid	No specific treatment.
<b>Protection of first-aiders</b>	: pSRF-Luc Vector	No action shall be taken involving any personal risk or without suitable training.
	pFC-PKA Plasmid	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: pSRF-Luc Vector	Use an extinguishing agent suitable for the surrounding fire.
	pFC-PKA Plasmid	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: pSRF-Luc Vector	None known.
	pFC-PKA Plasmid	None known.
<b>Specific hazards arising from the chemical</b>	: pSRF-Luc Vector	In a fire or if heated, a pressure increase will occur and the container may burst.
	pFC-PKA Plasmid	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.
<b>Special protective actions for fire-fighters</b>	: pSRF-Luc Vector	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.
	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.
<b>Special protective equipment for fire-fighters</b>	: pSRF-Luc Vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	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.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: 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.
<b>For emergency responders</b>	: 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".
<b>Environmental precautions</b>	: 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

<b>Methods for cleaning up</b>	: 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

<b>Protective measures</b>	: 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. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls and 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 and 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

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

## Section 9. Physical and chemical properties and safety characteristics

Ingredient name	Vapour Pressure at 20° C			Vapour pressure at 50° C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>pSRF-Luc Vector</b> water	17.5	2.3	-	92.258	12.3	-
<b>pFC-PKA Plasmid</b> water	17.5	2.3	-	92.258	12.3	-

**Relative vapour density** : pSRF-Luc Vector Not available.

pFC-PKA Plasmid Not available.

**Relative density** : pSRF-Luc Vector Not available.

pFC-PKA Plasmid Not available.

Solubility(ies)	Media	Result
<b>pSRF-Luc Vector</b> water		Soluble
<b>pFC-PKA Plasmid</b> water		Soluble

**Partition coefficient: n-octanol/water** : pSRF-Luc Vector Not applicable.  
pFC-PKA Plasmid Not applicable.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : pSRF-Luc Vector Not available.  
pFC-PKA Plasmid Not available.

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

### Particle characteristics

**Median particle size** : pSRF-Luc Vector Not applicable.  
pFC-PKA Plasmid Not applicable.

## 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.

## Section 10. Stability and reactivity

<b>Hazardous decomposition products</b>	: 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

**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.

<b>Information on likely routes of exposure</b>	: pSRF-Luc Vector	Not available.
	pFC-PKA Plasmid	Not available.

### Potential acute health effects

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

<b>Eye contact</b>	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.
<b>Inhalation</b>	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.
<b>Skin contact</b>	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.



## Section 11. Toxicological information

**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

<b>General</b>	: pSRF-Luc Vector pFC-PKA Plasmid	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: pSRF-Luc Vector pFC-PKA Plasmid	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: pSRF-Luc Vector pFC-PKA Plasmid	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: 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 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

**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 IMO instruments** : Not available.

## Section 15. Regulatory information

### Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### 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

**Australia** : All components are listed or exempted.

**New Zealand** : All components are listed or exempted.

**United States** : All components are active or exempted.

## Section 16. Any other relevant information

### History

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

**Date of previous issue** : 28/04/2021

**Version** : 7

## Section 16. Any other relevant information

### Key to abbreviations

: ADG = Australian Dangerous Goods  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
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)  
N/A = Not available  
SUSMP = Standard Uniform Schedule of Medicine and Poisons  
UN = United Nations

### Procedure used to derive the classification

#### Classification

Not classified.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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