

SAFETY DATA SHEET



PathDetect SRF cis Reporting System, Part Number 219081

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

1.1 Product identifier

Product name : 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

1.2 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)
Uses advised against : None known.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.
 5500 Lakeside Cheadle Royal Business Park,
 Cheadle, Cheshire, SK8 3GR
 United Kingdom
 Tel: +44 (0) 345 712 5292
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

Product definition : pSRF-Luc Vector Mixture
 pFC-PKA Plasmid Mixture

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

Not classified.

pSRF-Luc Vector The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
 pFC-PKA Plasmid The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

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

2.2 Label elements

Signal word : 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.

SECTION 2: Hazards identification

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.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: pSRF-Luc Vector pFC-PKA Plasmid	Not applicable. Not applicable.
Special packaging requirements		
Containers to be fitted with child-resistant fastenings	: pSRF-Luc Vector pFC-PKA Plasmid	Not applicable. Not applicable.
Tactile warning of danger	: pSRF-Luc Vector pFC-PKA Plasmid	Not applicable. Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: pSRF-Luc Vector pFC-PKA Plasmid	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: pSRF-Luc Vector pFC-PKA Plasmid	None known. None known.

SECTION 3: Composition/information on ingredients

3.1 Substances	: pSRF-Luc Vector pFC-PKA Plasmid	Mixture 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.

SECTION 4: First aid measures

4.1 Description of first aid measures

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

SECTION 4: First aid measures

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.
Protection of first-aiders	: 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.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

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.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: 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.
Specific treatments	: pSRF-Luc Vector	No specific treatment.
	pFC-PKA Plasmid	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: pSRF-Luc Vector	Use an extinguishing agent suitable for the surrounding fire.
	pFC-PKA Plasmid	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: pSRF-Luc Vector	None known.
	pFC-PKA Plasmid	None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: 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.
Hazardous combustion products	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.

5.3 Advice for firefighters

Special protective actions for fire-fighters	: 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.

SECTION 5: Firefighting measures

Special protective equipment for fire-fighters	: 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

6.1 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".

6.2 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).

6.3 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.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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

7.2 Conditions for safe storage, including any incompatibilities

Storage	: 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.

7.3 Specific end use(s)

Recommendations	: pSRF-Luc Vector	Industrial applications, Professional applications.
	pFC-PKA Plasmid	Industrial applications, Professional applications.
Industrial sector specific solutions	: pSRF-Luc Vector	Not available.
	pFC-PKA Plasmid	Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

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

Individual protection measures

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

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

Skin protection

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

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

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

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

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: pSRF-Luc Vector pFC-PKA Plasmid	Liquid. Liquid.
Colour	: pSRF-Luc Vector pFC-PKA Plasmid	Not available. Not available.
Odour	: pSRF-Luc Vector pFC-PKA Plasmid	Not available. Not available.
Odour threshold	: pSRF-Luc Vector pFC-PKA Plasmid	Not available. Not available.
Melting point/freezing point	: pSRF-Luc Vector pFC-PKA Plasmid	0°C 0°C
Initial boiling point and boiling range	: pSRF-Luc Vector pFC-PKA Plasmid	100°C 100°C
Flammability	: pSRF-Luc Vector pFC-PKA Plasmid	Not applicable. Not applicable.

SECTION 9: Physical and chemical properties

Upper/lower flammability or explosive limits : pSRF-Luc Vector Not available.
pFC-PKA Plasmid Not available.

Flash point : pSRF-Luc Vector Not available.
pFC-PKA Plasmid Not available.

Auto-ignition temperature : Not available.

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

pH : pSRF-Luc Vector 7.5
pFC-PKA Plasmid 7.5

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

Solubility(ies)	Media	Result
	pSRF-Luc Vector water	Soluble
	pFC-PKA Plasmid water	Soluble

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

Vapour pressure	Ingredient name	Vapour Pressure at 20°C			Vapour 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	-

Evaporation rate : pSRF-Luc Vector Not available.
pFC-PKA Plasmid Not available.

Relative density : pSRF-Luc Vector Not available.
pFC-PKA Plasmid Not available.

Vapour density : pSRF-Luc Vector Not available.
pFC-PKA Plasmid Not available.

Explosive properties : pSRF-Luc Vector Not available.
pFC-PKA Plasmid Not available.

Oxidising properties : 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.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 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.

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

SECTION 10: Stability and reactivity

10.3 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.
10.4 Conditions to avoid	: pSRF-Luc Vector	No specific data.
	pFC-PKA Plasmid	No specific data.
10.5 Incompatible materials	: pSRF-Luc Vector	May react or be incompatible with oxidising materials.
	pFC-PKA Plasmid	May react or be incompatible with oxidising materials.
10.6 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

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimates

N/A

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : pSRF-Luc Vector
pFC-PKA Plasmid

Not available.

Not available.

Potential acute health effects

Inhalation : 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.

Skin contact : pSRF-Luc Vector
pFC-PKA Plasmid

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Eye contact : pSRF-Luc Vector
pFC-PKA Plasmid

No known significant effects or critical hazards.
No known significant effects or critical hazards.

SECTION 11: Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No specific data. No specific data.
Ingestion	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No specific data. No specific data.
Skin contact	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No specific data. No specific data.
Eye contact	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No specific data. 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

Conclusion/Summary	: Not available.	
General	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: <input checked="" type="checkbox"/> SRF-Luc Vector pFC-PKA Plasmid	No known significant effects or critical hazards. No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

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

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

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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

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

Packaging

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

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

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

Additional information

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

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

UK (GB)/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.

Ozone depleting substances

SECTION 16: Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

Full text of abbreviated H statements

Not applicable.

Full text of classifications

Not applicable.

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

Date of previous issue : 28/04/2021

Version : 4

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.