

**Catalogue number: KIT-1110**

# Bacterial DNA Barcoding PCR Kit

**Size: 50 preps**

**Recommended use of the chemical and restrictions on use:**

Amplification of 16s rRNA full-length gene from genomic DNA of bacterial pure isolates for sequencing.  
For R&D use only. Not for pharmaceutical, household or other uses.

## SECTION 1 – IDENTIFICATION

**Product Identifier:** 16S Primer Mix

**Other means of identification:** PCR primers, oligonucleotides, single strand nucleic acid

**Recommended use of the chemical and restrictions on use:**  
For R&D use only. Not for pharmaceutical, household or other uses.

### Supplier Information:

**Axil Scientific Pte Ltd**  
41 Science Park Road  
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Singapore Science Park II  
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Tel: +65 6775 7318  
Fax: +65 6775 7211  
Email: [info@axilscientific.com](mailto:info@axilscientific.com)

**Apical Scientific Sdn Bhd**  
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Seri Kembangan 43300  
Selangor Darul Ehsan, Malaysia  
Tel: +603 8943 3252  
Fax: +603 8943 3243  
Email: [custcare@apicalscientific.com](mailto:custcare@apicalscientific.com)

### Emergency phone number:

Monday – Friday, **(UTC +8:00)** 8:00 a.m. to 6:00 p.m.  
+65 6775 7318 (Singapore)  
+603 8943 3252 (Malaysia & Other Countries)

## SECTION 2 – HAZARDS IDENTIFICATION

### GHS Classification:

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

**Other Hazard:** None.

## SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS CONTRIBUTING TO THE HAZARD

**Chemical characterization:** Mixture

**Chemical Identity:** Deoxyribonucleic Acid, Unmodified

**Synonyms:** DNA primer  
custom DNA oligos  
oligo  
oligonucleotides  
primers

**CAS No.:** 9007-49-2  
**EC No.:** Not available

### Other Components:

Components of mixture that are not listed are not hazardous to health or the environment within the meaning of GHS, and/or are present below their cut-off levels.

## SECTION 4 – FIRST-AID MEASURES

### Eye Contact

Flush eyes with water as a precaution.

### Skin Contact

Immediately wash skin thoroughly with soap and copious amounts of water. Remove contaminated clothing and shoes.

### Inhalation

Remove to fresh air. If not breathing, give artificial respiration or if breathing is difficult, give oxygen.

### Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

Data not available.

## SECTION 5 – FIRE-FIGHTING MEASURES

### Extinguishing Media

Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

### Special Exposure Hazards

Data not available.

### Special Fire-fighting Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### Further Information

The product itself does not burn.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### Personal precautions

Wear protective gloves, protective clothing, and eye/face protection. Observe general safety guidelines for protection; avoid eye and skin protection

### Environmental precautions

Contain spill to prevent migration. Do not allow the undiluted product to enter sewers/surface or ground water. Dispose of contents/container in accordance with local regulations.

### Methods for cleaning up

Treat spilled material with 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

## SECTION 7 – HANDLING AND STORAGE

### Precautions for safe handling

Prevent skin/eye contact. Use personal protective equipment. Avoid inhalation of vapour or mist. Ensure adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

Store in tightly closed container. To maintain product quality, store according to the instructions in the product labelling.

## SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

### Occupational Exposure Limits

We are not aware of any national exposure limit.

### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

### Eye/ Face Protection

Use safety glasses. Where contact with the eyes is likely, use chemical safety goggles.

### Skin/ Hand Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory Protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent waste of products from entering drains directly.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

a)	Appearance:	Clear, colorless liquid
b)	Odor:	Odorless
c)	Odor Threshold:	Not available
d)	pH:	7.0 - 9.0 (Neat, 25°C)
e)	Melting/freezing point:	Not available
f)	Initial boiling point and boiling range:	Not available
g)	Flash point:	Not available
h)	Evaporation rate:	Not available
i)	Flammability (solid, gas)	Not available
j)	Upper/lower flammability or explosive limits:	Not available
k)	Vapor pressure (mm Hg):	Not available
l)	Vapor density:	Not available
m)	Relative density:	Not available

n)	Solubility (ies):	Soluble in water
o)	Partition coefficient (n-octanol/water):	Not available
p)	Auto-ignition temperature:	Not available
q)	Decomposition temperature:	Not available
r)	Viscosity:	Not available

## SECTION 10 – STABILITY AND REACTIVITY

### Reactivity

Data not available.

### Chemical stability

Stable between -20°C to 4°C.

### Possibility of hazardous reactions

Data not available.

### Conditions to avoid

Strong heat, direct sunlight, strong oxidizers and strong reducers.

### Incompatible material

Oxidizers.

### Hazardous decomposition products

Data not available.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute toxicity

Data not available.

### Skin corrosion/irritation

Data not available.

### Serious eye damage/eye irritation

Data not available.

### Respiratory or skin sensitization

Data not available.

### Germ cell mutagenicity

Data not available.

### Carcinogenicity IARC

Data not available.

### Reproductive toxicity

Data not available.

### Specific target organ toxicity – single exposure

Data not available.

### Specific target organ toxicity – repeated exposure

Data not available.

## Aspiration hazard

Data not available.

## Potential Adverse human health effects and symptoms

Data not available.

## Other Information

RTECS: Data not available

## SECTION 12 – ECOLOGICAL INFORMATION

### Toxicity

Data not available.

### Persistence and degradability

Data not available.

### Bioaccumulative potential

Data not available.

### Mobility in soil

Soluble in water and diffusible into water environment.

### Other adverse effect

Data not available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose-off as unused product.

## SECTION 14 – TRANSPORT INFORMATION

### UN Number

ADR/RID: -

IMDG: -

IATA-DGR: -

### UN Proper Shipping Name:

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

### Transport Hazard Class(es)

ADR/RID: -

IMDG: -

IATA-DGR: -

### Packing Group

ADR/RID: -

IMDG: -

IATA-DGR: -

### Environmental Hazards

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

### Special Precaution for Users

Data not available.

## SECTION 15 – REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**  
Data not available.

## SECTION 16 – OTHER INFORMATION

**Date of Issue:** OCTOBER 18, 2020

**Date of Revision:** OCTOBER 27, 2020

*The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. We shall not be held liable for any damage resulting from handling or from contact with the above product.*

## SECTION 1 – IDENTIFICATION

**Product Identifier:** 16S Enzyme Mix

**Other means of identification:** Not available

**Recommended use of the chemical and restrictions on use:**  
For R&D use only. Not for pharmaceutical, household or other uses.

### Supplier Information:

**Axil Scientific Pte Ltd**  
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+603 8943 3252 (Malaysia & Other Countries)

## SECTION 2 – HAZARDS IDENTIFICATION

### GHS Classification:

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

**Other Hazard:** None.

## SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS CONTRIBUTING TO THE HAZARD

**Chemical characterization:** Mixture

Component (Corresponding Reagent)	Classification	Concentration (%)
<b>Glycerol (16S Enzyme Mix)</b>		
Cas-No. 56-81-5 EC-No. 200-289-5	The product contains no substances which at their given concentration, are considered to be hazardous to health.	1.0 to <3.0

## SECTION 4 – FIRST-AID MEASURES

### Eye Contact

Flush eyes with water as a precaution.

### Skin Contact

Immediately wash skin thoroughly with soap and copious amounts of water. Remove contaminated clothing and shoes.



**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration or if breathing is difficult, give oxygen.

**Ingestion**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Indication of immediate medical attention and special treatment needed**

Data not available.

**SECTION 5 – FIRE-FIGHTING MEASURES****Extinguishing Media**

Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

**Special Exposure Hazards**

Data not available.

**Special Fire-fighting Procedures**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Further Information**

The product itself does not burn.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Personal precautions**

Wear protective gloves, protective clothing, and eye/face protection. Observe general safety guidelines for protection; avoid eye and skin protection

**Environmental precautions**

Contain spill to prevent migration. Do not allow the undiluted product to enter sewers/surface or ground water. Dispose of contents/container in accordance with local regulations.

**Methods for cleaning up**

Treat spilled material with 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

**SECTION 7 – HANDLING AND STORAGE****Precautions for safe handling**

Prevent skin/eye contact. Use personal protective equipment. Avoid inhalation of vapour or mist. Ensure adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

**Conditions for safe storage, including any incompatibilities**

Store in tightly closed container at -20°C. To maintain product quality, store according to the instructions in the product labelling.

## SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

### Occupational Exposure Limits

Component	CAS-No.	Value	Control parameters	Basis
Glycerol	56-81-5	PEL (long-term)	10 mg/m <sup>3</sup>	Singapore. Workplace Safety and Health Act – First Schedule Permissible Exposure Limits of Toxic Substances

### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice.

### Eye/ Face Protection

Use safety glasses. Where contact with the eyes is likely, use chemical safety goggles.

### Skin/ Hand Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory Protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent waste of products from entering drains directly.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- |    |   |                         |
|----|---|-------------------------|
| a) | Appearance:                                   | Clear, colorless liquid |
| b) | Odor:   | Odorless                |
| c) | Odor Threshold:                               | Not available           |
| d) | pH:   | 7.0 - 9.0 (Neat, 25°C)  |
| e) | Melting/freezing point:                       | Not available           |
| f) | Initial boiling point and boiling range:      | Not available           |
| g) | Flash point:                                  | Not available           |
| h) | Evaporation rate:                             | Not available           |
| i) | Flammability (solid, gas)                     | Not available           |
| j) | Upper/lower flammability or explosive limits: | Not available           |

k)	Vapor pressure (mm Hg):	Not available
l)	Vapor density:	Not available
m)	Relative density:	Not available
n)	Solubility (ies):	Soluble in water
o)	Partition coefficient (n-octanol/water):	Not available
p)	Auto-ignition temperature:	Not available
q)	Decomposition temperature:	Not available
r)	Viscosity:	Not available

## SECTION 10 – STABILITY AND REACTIVITY

### Reactivity

Data not available.

### Chemical stability

Stable at -20°C.

### Possibility of hazardous reactions

Data not available.

### Conditions to avoid

Strong heat, direct sunlight, strong oxidizers and strong reducers.

### Incompatible material

Oxidizers.

### Hazardous decomposition products

Data not available.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute toxicity

Data not available.

### Skin corrosion/irritation

Data not available.

### Serious eye damage/eye irritation

Data not available.

### Respiratory or skin sensitization

Data not available.

### Germ cell mutagenicity

Data not available.

### Carcinogenicity IARC

Data not available.

### Reproductive toxicity

Data not available.

## Specific target organ toxicity – single exposure

Data not available.

## Specific target organ toxicity – repeated exposure

Data not available.

## Aspiration hazard

Data not available.

## Potential Adverse human health effects and symptoms:

Few adverse human health effects are anticipated.

## Other Information

RTECS: Data not available

## SECTION 12 – ECOLOGICAL INFORMATION

### Toxicity

Data not available.

### Persistence and degradability

Data not available.

### Bioaccumulative potential

Data not available.

### Mobility in soil

Soluble in water and diffusible into water environment.

### Other adverse effect

Data not available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose-off as unused product.

## SECTION 14 – TRANSPORT INFORMATION

### UN Number

ADR/RID: -

IMDG: -

IATA-DGR: -

### UN Proper Shipping Name:

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

### Transport Hazard Class(es)

ADR/RID: -

IMDG: -

IATA-DGR: -

### Packing Group

ADR/RID: -

IMDG: -

IATA-DGR: -

### Environmental Hazards

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

**Special Precaution for Users**

Data not available.

**SECTION 15 – REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture**

Data not available.

**SECTION 16 – OTHER INFORMATION**

**Date of Issue:** OCTOBER 18, 2020

**Date of Revision:** OCTOBER 27, 2020

*The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. We shall not be held liable for any damage resulting from handling or from contact with the above product.*

## SECTION 1 – IDENTIFICATION

**Product Identifier:** Bacterial Plasmid Positive Control

**Other means of identification:** Plasmid DNA

**Recommended use of the chemical and restrictions on use:**  
For R&D use only. Not for pharmaceutical, household or other uses.

### Supplier Information:

**Axil Scientific Pte Ltd**  
41 Science Park Road  
#01-22/23, The Gemini  
Singapore Science Park II  
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Email: [info@axilscientific.com](mailto:info@axilscientific.com)

**Apical Scientific Sdn Bhd**  
No 7-1 to 7-4, Jalan SP 2/7  
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Selangor Darul Ehsan, Malaysia  
Tel: +603 8943 3252  
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Email: [custcare@apicalscientific.com](mailto:custcare@apicalscientific.com)

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+65 6775 7318 (Singapore)  
+603 8943 3252 (Malaysia & Other Countries)

## SECTION 2 – HAZARDS IDENTIFICATION

### GHS Classification:

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

**Other Hazard:** None.

## SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS CONTRIBUTING TO THE HAZARD

**Chemical characterization:** Mixture

**Chemical Identity:** Deoxyribonucleic Acid, Unmodified

**Synonyms:** Plasmid DNA  
Plasmid

**CAS No.:** 9007-49-2  
**EC No.:** Not available

### Other Components:

Components of mixture that are not listed are not hazardous to health or the environment within the meaning of GHS, and/or are present below their cut-off levels.

## SECTION 4 – FIRST-AID MEASURES

### Eye Contact

Flush eyes with water as a precaution.

**Skin Contact**

Immediately wash skin thoroughly with soap and copious amounts of water. Remove contaminated clothing and shoes.

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration or if breathing is difficult, give oxygen.

**Ingestion**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Indication of immediate medical attention and special treatment needed**

Data not available.

**SECTION 5 – FIRE-FIGHTING MEASURES****Extinguishing Media**

Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

**Special Exposure Hazards**

Data not available.

**Special Fire-fighting Procedures**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Further Information**

The product itself does not burn.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Personal precautions**

Wear protective gloves, protective clothing, and eye/face protection. Observe general safety guidelines for protection; avoid eye and skin protection

**Environmental precautions**

Contain spill to prevent migration. Do not allow the undiluted product to enter sewers/surface or ground water. Dispose of contents/container in accordance with local regulations.

**Methods for cleaning up**

reat spilled material with 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

**SECTION 7 – HANDLING AND STORAGE****Precautions for safe handling**

Prevent skin/eye contact. Use personal protective equipment. Avoid inhalation of vapour or mist. Ensure adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

**Conditions for safe storage, including any incompatibilities**

Store in tightly closed container. To maintain product quality, store according to the instructions in the product labelling.

**SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION****Occupational Exposure Limits**

We are not aware of any national exposure limit.

## Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

## Eye/ Face Protection

Use safety glasses. Where contact with the eyes is likely, use chemical safety goggles.

## Skin/ Hand Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

## Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory Protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

Prevent waste of products from entering drains directly.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

a)	Appearance:	Clear, colorless liquid
b)	Odor:	Odorless
c)	Odor Threshold:	Not available
d)	pH:	7.0 - 9.0 (Neat, 25°C)
e)	Melting/freezing point:	Not available
f)	Initial boiling point and boiling range:	Not available
g)	Flash point:	Not available
h)	Evaporation rate:	Not available
i)	Flammability (solid, gas)	Not available
j)	Upper/lower flammability or explosive limits:	Not available
k)	Vapor pressure (mm Hg):	Not available
l)	Vapor density:	Not available
m)	Relative density:	Not available
n)	Solubility (ies):	Soluble in water
o)	Partition coefficient (n-octanol/water):	Not available
p)	Auto-ignition temperature:	Not available



q) Decomposition temperature: Not available

r) Viscosity: Not available

## SECTION 10 – STABILITY AND REACTIVITY

### Reactivity

Data not available.

### Chemical stability

Stable between -20°C to 4°C.

### Possibility of hazardous reactions

Data not available.

### Conditions to avoid

Strong heat, direct sunlight, strong oxidizers and strong reducers.

### Incompatible material

Oxidizers.

### Hazardous decomposition products

Data not available.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute toxicity

Data not available.

### Skin corrosion/irritation

Data not available.

### Serious eye damage/eye irritation

Data not available.

### Respiratory or skin sensitization

Data not available.

### Germ cell mutagenicity

Data not available.

### Carcinogenicity IARC

Data not available.

### Reproductive toxicity

Data not available.

### Specific target organ toxicity – single exposure

Data not available.

### Specific target organ toxicity – repeated exposure

Data not available.

### Aspiration hazard

Data not available.

### Potential Adverse human health effects and symptoms

Data not available.

## Other Information

RTECS: Data not available

## SECTION 12 – ECOLOGICAL INFORMATION

### Toxicity

Data not available.

### Persistence and degradability

Data not available.

### Bioaccumulative potential

Data not available.

### Mobility in soil

Soluble in water and diffusible into water environment.

### Other adverse effect

Data not available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose-off as unused product.

## SECTION 14 – TRANSPORT INFORMATION

### UN Number

ADR/RID: -

IMDG: -

IATA-DGR: -

### UN Proper Shipping Name:

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

### Transport Hazard Class(es)

ADR/RID: -

IMDG: -

IATA-DGR: -

### Packing Group

ADR/RID: -

IMDG: -

IATA-DGR: -

### Environmental Hazards

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

### Special Precaution for Users

Data not available.

## SECTION 15 – REGULATORY INFORMATION

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

Data not available.

## SECTION 16 – OTHER INFORMATION

**Date of Issue:** OCTOBER 18, 2020

**Date of Revision:** OCTOBER 27, 2020

*The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. We shall not be held liable for any damage resulting from handling or from contact with the above product.*

## SECTION 1 – IDENTIFICATION

**Product Identifier:** Sequencing Forward Primer (785F)

**Other means of identification:** Sequencing primer, oligonucleotide, single strand nucleic acid

**Recommended use of the chemical and restrictions on use:**  
For R&D use only. Not for pharmaceutical, household or other uses.

### Supplier Information:

**Axil Scientific Pte Ltd**  
41 Science Park Road  
#01-22/23, The Gemini  
Singapore Science Park II  
Singapore 117610  
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### Emergency phone number:

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+603 8943 3252 (Malaysia & Other Countries)

## SECTION 2 – HAZARDS IDENTIFICATION

### GHS Classification:

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

**Other Hazard:** None.

## SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS CONTRIBUTING TO THE HAZARD

**Chemical characterization:** Mixture

**Chemical Identity:** Deoxyribonucleic Acid, Unmodified

**Synonyms:** DNA primer  
custom DNA oligo  
oligo  
oligonucleotide  
primer  
sequencing primer

**CAS No.:** 9007-49-2  
**EC No.:** Not available

### Other Components:

Components of mixture that are not listed are not hazardous to health or the environment within the meaning of GHS, and/or are present below their cut-off levels.

## SECTION 4 – FIRST-AID MEASURES

### Eye Contact

Flush eyes with water as a precaution.

### Skin Contact

Immediately wash skin thoroughly with soap and copious amounts of water. Remove contaminated clothing and shoes.

### Inhalation

Remove to fresh air. If not breathing, give artificial respiration or if breathing is difficult, give oxygen.

### Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

Data not available.

## SECTION 5 – FIRE-FIGHTING MEASURES

### Extinguishing Media

Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

### Special Exposure Hazards

Data not available.

### Special Fire-fighting Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### Further Information

The product itself does not burn.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### Personal precautions

Wear protective gloves, protective clothing, and eye/face protection. Observe general safety guidelines for protection; avoid eye and skin protection

### Environmental precautions

Contain spill to prevent migration. Do not allow the undiluted product to enter sewers/surface or ground water. Dispose of contents/container in accordance with local regulations.

### Methods for cleaning up

Treat spilled material with 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

## SECTION 7 – HANDLING AND STORAGE

### Precautions for safe handling

Prevent skin/eye contact. Use personal protective equipment. Avoid inhalation of vapour or mist. Ensure adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

Store in tightly closed container. To maintain product quality, store according to the instructions in the product labelling.

## SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

### Occupational Exposure Limits

We are not aware of any national exposure limit.

### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

### Eye/ Face Protection

Use safety glasses. Where contact with the eyes is likely, use chemical safety goggles.

### Skin/ Hand Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory Protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent waste of products from entering drains directly.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

a)	Appearance:	Clear, colorless liquid
b)	Odor:	Odorless
c)	Odor Threshold:	Not available
d)	pH:	7.0 - 9.0 (Neat, 25°C)
e)	Melting/freezing point:	Not available
f)	Initial boiling point and boiling range:	Not available
g)	Flash point:	Not available
h)	Evaporation rate:	Not available
i)	Flammability (solid, gas)	Not available
j)	Upper/lower flammability or explosive limits:	Not available
k)	Vapor pressure (mm Hg):	Not available
l)	Vapor density:	Not available
m)	Relative density:	Not available

n)	Solubility (ies):	Soluble in water
o)	Partition coefficient (n-octanol/water):	Not available
p)	Auto-ignition temperature:	Not available
q)	Decomposition temperature:	Not available
r)	Viscosity:	Not available

## SECTION 10 – STABILITY AND REACTIVITY

### Reactivity

Data not available.

### Chemical stability

Stable between -20°C to 4°C.

### Possibility of hazardous reactions

Data not available.

### Conditions to avoid

Strong heat, direct sunlight, strong oxidizers and strong reducers.

### Incompatible material

Oxidizers.

### Hazardous decomposition products

Data not available.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute toxicity

Data not available.

### Skin corrosion/irritation

Data not available.

### Serious eye damage/eye irritation

Data not available.

### Respiratory or skin sensitization

Data not available.

### Germ cell mutagenicity

Data not available.

### Carcinogenicity IARC

Data not available.

### Reproductive toxicity

Data not available.

### Specific target organ toxicity – single exposure

Data not available.

### Specific target organ toxicity – repeated exposure

Data not available.

## Aspiration hazard

Data not available.

## Potential Adverse human health effects and symptoms

Data not available.

## Other Information

RTECS: Data not available

## SECTION 12 – ECOLOGICAL INFORMATION

### Toxicity

Data not available.

### Persistence and degradability

Data not available.

### Bioaccumulative potential

Data not available.

### Mobility in soil

Soluble in water and diffusible into water environment.

### Other adverse effect

Data not available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose-off as unused product.

## SECTION 14 – TRANSPORT INFORMATION

### UN Number

ADR/RID: -

IMDG: -

IATA-DGR: -

### UN Proper Shipping Name:

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

### Transport Hazard Class(es)

ADR/RID: -

IMDG: -

IATA-DGR: -

### Packing Group

ADR/RID: -

IMDG: -

IATA-DGR: -

### Environmental Hazards

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

### Special Precaution for Users

Data not available.



## SECTION 15 – REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**  
Data not available.

## SECTION 16 – OTHER INFORMATION

**Date of Issue:** OCTOBER 18, 2020

**Date of Revision:** OCTOBER 27, 2020

*The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. We shall not be held liable for any damage resulting from handling or from contact with the above product.*

## SECTION 1 – IDENTIFICATION

**Product Identifier:** Sequencing Reverse Primer (907R)

**Other means of identification:** Sequencing primer, oligonucleotide, single strand nucleic acid

**Recommended use of the chemical and restrictions on use:**  
For R&D use only. Not for pharmaceutical, household or other uses.

### Supplier Information:

**Axil Scientific Pte Ltd**  
41 Science Park Road  
#01-22/23, The Gemini  
Singapore Science Park II  
Singapore 117610  
Tel: +65 6775 7318  
Fax: +65 6775 7211  
Email: [info@axilscientific.com](mailto:info@axilscientific.com)

**Apical Scientific Sdn Bhd**  
No 7-1 to 7-4, Jalan SP 2/7  
Taman Serdang Perdana, Seksyen 2  
Seri Kembangan 43300  
Selangor Darul Ehsan, Malaysia  
Tel: +603 8943 3252  
Fax: +603 8943 3243  
Email: [custcare@apicalscientific.com](mailto:custcare@apicalscientific.com)

### Emergency phone number:

Monday – Friday, **(UTC +8:00)** 8:00 a.m. to 6:00 p.m.  
+65 6775 7318 (Singapore)  
+603 8943 3252 (Malaysia & Other Countries)

## SECTION 2 – HAZARDS IDENTIFICATION

### GHS Classification:

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

**Other Hazard:** None.

## SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS CONTRIBUTING TO THE HAZARD

**Chemical characterization:** Mixture

**Chemical Identity:** Deoxyribonucleic Acid, Unmodified

**Synonyms:** DNA primer  
custom DNA oligo  
oligo  
oligonucleotide  
primer  
sequencing primer

**CAS No.:** 9007-49-2  
**EC No.:** Not available

### Other Components:

Components of mixture that are not listed are not hazardous to health or the environment within the meaning of GHS, and/or are present below their cut-off levels.

## SECTION 4 – FIRST-AID MEASURES

### Eye Contact

Flush eyes with water as a precaution.

### Skin Contact

Immediately wash skin thoroughly with soap and copious amounts of water. Remove contaminated clothing and shoes.

### Inhalation

Remove to fresh air. If not breathing, give artificial respiration or if breathing is difficult, give oxygen.

### Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

Data not available.

## SECTION 5 – FIRE-FIGHTING MEASURES

### Extinguishing Media

Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

### Special Exposure Hazards

Data not available.

### Special Fire-fighting Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### Further Information

The product itself does not burn.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### Personal precautions

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k)	Vapor pressure (mm Hg):	Not available
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m)	Relative density:	Not available

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## Aspiration hazard

Data not available.

## Potential Adverse human health effects and symptoms

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## Other Information

RTECS: Data not available

## SECTION 12 – ECOLOGICAL INFORMATION

### Toxicity

Data not available.

### Persistence and degradability

Data not available.

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### Mobility in soil

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### Other adverse effect

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IMDG: -

IATA-DGR: -

### Packing Group

ADR/RID: -

IMDG: -

IATA-DGR: -

### Environmental Hazards

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

### Special Precaution for Users

Data not available.

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