Safety Data Sheet

Product and Company Information

Product Name: pDUO2-<Gene>

Cat. Code: pduo2-<gene>

InvivoGen USA, 3950 Sorrento Valley Blvd, Suite 100
San Diego, California 92121, USA
(+1) 888 457 5873

InvivoGen Europe, 5 rue Jean Rodier
31400 Toulouse, FRANCE
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InvivoGen Hong Kong, Unit 709A, Bio-Informatics Center
2 Science Park West Avenue, Hong Kong Science Park
Shatin, Hong Kong
+852 3622 3480

Emergency number: ORFILA (INRS): +33 (0)1 45 42 59 59

Disclaimer: All InvivoGen products are supplied for research and laboratory use only. Not for drug, household or other uses.

This product contains multiple components, which are listed below. An SDS for each component is provided.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>GHS Classification</th>
<th>Pictogram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasmid DNA</td>
<td>Not available</td>
<td>Not available</td>
<td>Not dangerous</td>
<td>None</td>
</tr>
<tr>
<td>Fast-Media® Hygro Agar (Luria Broth based agar selective medium) contains Hygromycin B CAS no. 31282-04-9</td>
<td>Not available</td>
<td>Not available</td>
<td>Acute toxicity, Inhalation (Cat. 2) Acute toxicity, Dermal (Cat.2) Acute toxicity, Oral (Cat. 2) Serious eye damage (Cat. 1)</td>
<td></td>
</tr>
<tr>
<td>Fast-Media® Hygro TB (Terrific Broth based selective medium) contains Hygromycin B CAS no. 31282-04-9</td>
<td>Not available</td>
<td>Not available</td>
<td>Acute toxicity, Inhalation (Cat. 2) Acute toxicity, Dermal (Cat.2) Acute toxicity, Oral (Cat. 2) Serious eye damage (Cat. 1)</td>
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Section 1 - Product and Company Information

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Section 2 – Hazards Identification

Emergency Overview:
OSHA Hazards
No known OSHA hazards

2.1 Classification of substance
Not a hazardous substance or mixture according to EC-Directives 67/548/EEC or 1999/45/EC.
Not a hazardous substance or mixture according to CLP-Regulation (EC) No. 1272/2008.

2.2 Label elements
The product does not need to be labeled in accordance with EC-Directives 67/548/EEC, to CLP-Regulation (EC) No. 1272/2008 or respective national laws.

2.3 Other hazards - none

Section 3 – Composition/Information on Ingredient

Synonyms: Plasmid DNA

CAS number: Not available

Section 4 – First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

After skin contact: Immediately wash skin with soap and plenty of water. Consult a physician.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water provided person is conscious. Consult a physician.

After inhalation: Remove to fresh air. If not breathing give artificial respiration. Consult a physician.

After eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.
Section 5 – Fire Fighting Measures

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate foam.
Specific hazards arising from the chemical: No data available
Special Firefighting Procedures: Wear self-contained breathing apparatus for fire fighting if necessary.

Section 6 – Accidental Release Measures

Personal precautions: Wear protective equipment. Keep unprotected persons away. Avoid dust formation.
Method for Cleaning Up: Sweep up and place in closed containers for disposal. Dispose contaminated material as waste according to section 13. Ventilate area and wash spill site after material clean-up is complete.

Section 7 – Handling and Storage

Handling: Avoid contact with eyes, skin and clothing. Avoid dust formation.
User Exposure: Avoid dust formation. Use personal protective equipment (i.e. impermeable gloves, lab coat or apron).
Storage: Store at -20 °C.

Section 8 – Exposure Controls / PPE

Personal protective equipment

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).

Hand protection
For prolonged or repeated contact use protective gloves.

Eye protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures
General industrial hygiene practice.

Section 9 – Physical / Chemical Properties

Appearance
Physical state: Solid
Color: White

Safety Data
Odor: No data available
Odor threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability: No data available
Upper/lower flammability or explosive limits: No data available
Vapor pressure: No data available
Relative density: No data available
Solubility: No data available
Partition coefficient: n-octanol/water: No data available
Autoignition temperature: No data available
Decomposition temperature: No data available
Section 10 – Stability and Reactivity

Reactivity: No data available
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No data available
Conditions to avoid: No data available
Incompatible materials: No data available
Hazardous decomposition products: No data available

Section 11 – Toxicological Information

Acute toxicity:
Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other information on acute toxicity: No data available
Skin corrosion/irritation: No data available
Serious eye damage/irritation: No data available
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Additional information: No data available

Section 12 – Ecological Information

Ecotoxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available

Section 13 – Disposal Considerations

Product: Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.
Contaminated Packaging: Dispose of as unused product.

Section 14 – Transport Information

ADR/RID: Not dangerous goods
DOT (US): Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

15.2 Chemical Safety Assessment
no data available
Section 16 – Other Information

The information contained in this SDS relates only to the material(s) designated and does not relate to use(s) in combination with any other material, process(es) and/or chemical reaction(s). InvivoGen provides this information in good faith and is based on our present knowledge. This SDS is provided without warranty of any kind. The recipient is responsible for ensuring that, where applicable, existing laws and guidelines are observed.
Section 1 - Product and Company Information

Product Name: Fast-Media® Hygro Agar

Cat. Code: fas-hg-s

InvivoGen USA, 3950 Sorrento Valley Blvd, Suite 100
San Diego, California 92121, USA
(+1) 888 457 5873

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Shatin, Hong Kong
+852 3622 3480

Emergency number: ORFILA (INRS): +33 (0)1 45 42 59 59

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Section 2 – Hazards Identification

Emergency Overview:
OSHA Hazards
Highly toxic by inhalation, ingestion or skin absorption. Risk of serious damage to eyes. Target organ effect.
Target organs: Ears.

GHS classification
Acute toxicity, Inhalation (Category 2)
Acute toxicity, Dermal (Category 2)
Acute toxicity, Oral (Category 2)
Serious eye damage (Category 1)

Signal word Danger

Hazard statement
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.
P284 Wear respiratory protection.

Product Fast-Media® Hygro Agar
Revision Date 01 Jul. 2015
Version 1.1
Safety Data Sheet

Section 3 – Composition/Information on Ingredient

**Synonyms:** LB based agar medium supplemented with Hygromycin B

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EC Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygromycin B</td>
<td>31282-04-9</td>
<td>Not available</td>
</tr>
<tr>
<td>Agar</td>
<td>9002-18-0</td>
<td>232-658-1</td>
</tr>
</tbody>
</table>

Section 4 – First Aid Measures

**General advice:** Consult a physician. Show this material safety data sheet to the doctor in attendance.

**After skin contact:** Immediately wash skin with soap and plenty of water. Consult a physician.

**After swallowing:** Never give anything by mouth to an unconscious person. Rinse mouth with water provided person is conscious. Consult a physician.

**After inhalation:** Remove to fresh air. If not breathing give artificial respiration. Consult a physician.

**After eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

Section 5 – Fire Fighting Measures

**Suitable extinguishing media:** Water spray, carbon dioxide, dry chemical powder or appropriate foam.

**Specific hazards arising from the chemical:** No data available

**Special Firefighting Procedures:** Wear self-contained breathing apparatus for fire fighting if necessary.

Section 6 – Accidental Release Measures

**Personal precautions:** Wear protective equipment. Keep unprotected persons away. Avoid dust formation.

**Method for Cleaning Up:** Sweep up and place in closed containers for disposal. Dispose contaminated material as waste according to section 13. Ventilate area and wash spill site after material clean-up is complete.

Section 7 – Handling and Storage

**Handling:** Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

**User Exposure:** Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or apron).

**Storage:** Store at room temperature.

Section 8 – Exposure Controls / PPE

**Personal protective equipment**

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**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.
Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Section 9 – Physical / Chemical Properties

Appearance
Physical state: Powder
Color: Beige

Safety Data
Odor: No data available
Odor threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability: No data available
Upper/lower flammability or explosive limits: No data available
Vapor pressure: No data available
Relative density: No data available
Solubility: No data available
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available

Section 10 – Stability and Reactivity

Reactivity: No data available
Chemical stability: Stable under recommended storage conditions
Possibility of hazardous reactions: No data available
Conditions to avoid: No data available
Incompatible materials: Strong oxidizing agents, strong bases
Hazardous decomposition products: No data available

Section 11 – Toxicological Information

Acute toxicity:
LD50 Intraperitoneal: 63 mg/kg rat (hygromycin B)
Inhalation LC50: No data available
Dermal LD50: No data available
Other information on acute toxicity: LD50 Intravenous: 6 mg/kg mouse (hygromycin B)
Skin corrosion/irritation: No data available
Serious eye damage/irritation: Causes serious eye damage (hygromycin B)
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Additional information: No data available

Section 12 – Ecological Information

Ecotoxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available

Section 13 – Disposal Considerations

Product: Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.

Contaminated Packaging: Dispose of as unused product.

Section 14 – Transport Information

ARD/RID: Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B) UN#: 2811 Class: 6.1
Packing group: I Marine pollutant: No Poison Inhalation Hazard: No

DOT (US): Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B) UN#: 2811 Class: 6.1
Packing group: I Marine pollutant: No Poison Inhalation Hazard: No

IMDG: UN#: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B) Marine pollutant: No

IATA: UN#: 2811 Class: 6.1 Packing group: I Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B)

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment
No data available

Section 16 – Other Information

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Section 1 - Product and Company Information

Product Name: Fast-Media® Hygro TB

Cat. Code: fas-hg-l

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San Diego, California 92121, USA
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Signal word Danger

Hazard statement
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.
P284 Wear respiratory protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Section 3 – Composition/Information on Ingredient

Synonyms: E.coli selection medium containing hygromycin B
CAS number: 31282-04-9 (Hygromycin B)

Section 4 – First Aid Measures

General advice: Consult a physician. Show this material safety data sheet to the doctor in attendance.
After skin contact: Immediately wash skin with soap and plenty of water. Consult a physician.
After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water provided person is conscious. Consult a physician.
After inhalation: Remove to fresh air. If not breathing give artificial respiration. Consult a physician.
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Specific hazards arising from the chemical: No data available
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User Exposure: Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or apron).
Storage: Store at room temperature.

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Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
Section 9 – Physical / Chemical Properties

Appearance
Physical state: Powder
Color: Beige

Safety Data
Odor: No data available
Odor threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
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Evaporation rate: No data available
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Vapor pressure: No data available
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**Contaminated Packaging:** Dispose of as unused product.

Section 14 – Transport Information

**ARD/RID:** Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B) UN#: 2811 Class: 6.1
Packing group: I Marine pollutant: No Poison Inhalation Hazard: No

**DOT (US):** Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B) UN#: 2811 Class: 6.1
Packing group: I Marine pollutant: No Poison Inhalation Hazard: No

**IMDG:** UN#: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B) Marine pollutant: No

**IATA:** UN#: 2811 Class: 6.1 Packing group: I Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Hygromycin B)

Section 15 – Regulatory Information

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