

G-Biosciences/Genotech: St. Louis, MO, USA; www.GBiosciences.com email: technical@GBiosciences.com

Product: CasPASE™ Apoptosis Assay Kit [LU 7.16.09/JK]

Catalog #: 786-200A/786-200B, 786-201A/786-201B, 786-202A/786-202B, 786-203A/786-203B, 786-204A/786-204B, 786-205A/786-205B and 786-206A/786-206B

<u>Components</u>	<u>A (50 Assays)</u>	<u>B (100 Assays)</u>
CasPASE™ Lysis Buffer	15ml	2x15ml
2X CasPASE™ Assay Buffer	5ml	2x5ml
DTT Solution (1M)	0.06ml	2x0.06ml
Free Dye (AFC) (8mM)	0.2ml	2x0.2ml
Inhibitor (Z-VAD-FMK) (1mM)	0.1ml	2x0.1ml
Substrate Solution*	0.25ml	2x0.25ml

*As listed below against Cat.#

Catalog #	Description*
786-200	Cas-PASE™-1, 4, 5 Assay kit, supplied with Ac-WEHD-AFC substrate
786-201	Cas-PASE™-2 Assay kit, supplied with Ac-VDVAD-AFC substrate
786-202	Cas-PASE™-3, 7, 10 Assay kit, supplied with Ac-DEVD-AFC substrate
786-203	Cas-PASE™-6 Assay kit, supplied with Ac-VEID-AFC substrate
786-204	Cas-PASE™-8 Assay kit, supplied with Ac-LETD-AFC substrate
786-205	Cas-PASE™-9 Assay kit, supplied with Ac-LEHD-AFC substrate
786-206	Cas-PASE™-13 Assay kit, supplied with Ac-LEED-AFC substrate

Material Safety Data Sheet

Section 1: Chemical Identification

Name: CasPASE™ Lysis Buffer

Catalog #: a component of product Cat# 786-200 to 786-205 indicated above.

Section 2: Composition/Information on Ingredients

Not Available. Dilute solution of salts.

Section 3: Hazards Identification

Label precautionary statements. Irritating to eyes, respiratory system, and, skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 4: First-Aid Measures

After eye contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

After skin contact: Immediately wash skin with soap and copious amounts of water.

After Inhalation: None needed

After swallowing: Wash out mouth with water provided person is conscious.

Call a physician. Wash contaminated clothing before reuse.

Section 5: Fire Fighting Measures

Extinguishing Agents:

Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

Section 6: Accidental Release Measures

Human Safety Precautions:

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal.

Section 7: Handling and Storage

Refer to section 8.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment:

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

General Protective and Hygiene Measures:

Mechanical exhaust required. None needed

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Clear

Odor: None

Section 10: Stability and Reactivity

Thermal Decomposition/Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions known.

Dangerous Products of Decomposition: No known dangerous decomposition products.

Section 11: Toxicological Information

Acute Effects/Toxicity:

Primary Irritant Effects: Harmful if ingested.

On the skin: Material is irritating to skin and mucous membranes.

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Section 12: Ecological Information

Data not yet available.

Section 13: Disposal Considerations

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

Observe all federal, state and local environmental regulations.

Section 14: Transport Information

Not dangerous goods. Safe for all transport.

Section 15: Regulatory information

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. G-Biosciences shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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Material Safety Data Sheet

Section 1: Chemical Identification

Name: 2X CasPASE™ Assay Buffer

Catalog #: a component of product Cat# 786-200 to 786-205 indicated above.

Section 2: Composition/Information on Ingredients

Not available. Dilute solution of salts.

Section 3: Hazards Identification

Label precautionary statements. Irritating to eyes, respiratory system, and, skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 4: First-Aid Measures

After eye contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

After skin contact: Immediately wash skin with soap and copious amounts of water.

After Inhalation: None needed

After swallowing: Wash out mouth with water provided person is conscious.

Call a physician. Wash contaminated clothing before reuse.

Section 5: Fire Fighting Measures

Extinguishing Agents:

Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

Section 6: Accidental Release Measures

Human Safety Precautions:

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal.

Section 7: Handling and Storage

Refer to section 8.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment:

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

General Protective and Hygiene Measures:

Mechanical exhaust required.

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Clear

Odor: None

Section 10: Stability and Reactivity

Thermal Decomposition/Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions known.

Dangerous Products of Decomposition: No known dangerous decomposition products.

Section 11: Toxicological Information

Acute Effects/Toxicity:

Primary Irritant Effects: Harmful if ingested.

On the skin: Material is irritating to skin and mucous membranes.

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Section 12: Ecological Information

Data not yet available.

Section 13: Disposal Considerations

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

Observe all federal, state and local environmental regulations.

Section 14: Transport Information

Not dangerous goods. Safe for all transport.

Section 15: Regulatory information

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: Other Information

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Material Safety Data Sheet

Section 1: Chemical Identification

Name: DTT Solution (1M)

Catalog #: a component of product Cat# 786-200 to 786-205 indicated above.

Section 2: Composition/Information on Ingredients

Not available. Dilute solution of DTT.

Section 3: Hazards Identification

Label precautionary statements. Irritating to eyes, respiratory system, and, skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 4: First-Aid Measures

After eye contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

After skin contact: Immediately wash skin with soap and copious amounts of water.

After Inhalation: none needed

After swallowing: Wash out mouth with water provided person is conscious.

Call a physician. Wash contaminated clothing before reuse.

Section 5: Fire Fighting Measures

Extinguishing Agents:

Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

Section 6: Accidental Release Measures

Human Safety Precautions:

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal.

Section 7: Handling and Storage

Refer to section 8.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment:

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

General Protective and Hygiene Measures:

Mechanical exhaust required. None needed

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Clear

Odor: None

Section 10: Stability and Reactivity

Thermal Decomposition/Conditions to be Avoided:

No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions known.

Dangerous Products of Decomposition: No known dangerous decomposition products.

Section 11: Toxicological Information

Acute Effects/Toxicity:

Primary Irritant Effects: Harmful if ingested.

On the skin: Material is irritating to skin and mucous membranes.

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Section 12: Ecological Information

Data not yet available.

Section 13: Disposal Considerations

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

Observe all federal, state and local environmental regulations.

Section 14: Transport Information

Not dangerous goods. Safe for all transport.

Section 15: Regulatory information

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: Other Information

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Material Safety Data Sheet

Section 1: Chemical Identification

Name: Ac-WEHD-AFC Substrate Solution and all other substrate listed in the table above.

Catalog #: a component of product Cat. # 786-200 - 205

Section 2: Composition/Information on Ingredients

Not available. Diluted solution of peptide

Section 3: Hazards Identification

Label precautionary statements. Irritating to eyes, respiratory system, and, skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 4: First-Aid Measures

After eye contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

After skin contact: Immediately wash skin with soap and copious amounts of water.

After Inhalation: None needed

After swallowing: Wash out mouth with water provided person is conscious.

Call a physician. Wash contaminated clothing before reuse.

Section 5: Fire Fighting Measures

Extinguishing Agents:

Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

Section 6: Accidental Release Measures

Human Safety Precautions:

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal.

Ventilate area and wash spill site after material pickup is complete.

Section 7: Handling and Storage

Refer to section 8.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment:

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

General Protective and Hygiene Measures:

Mechanical exhaust required. None needed.

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Clear

Odor: None

Section 10: Stability and Reactivity

Thermal Decomposition/Conditions to be Avoided:

No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions known.

Dangerous Products of Decomposition: No known dangerous decomposition products.

Section 11: Toxicological Information

Acute Effects/Toxicity:

Primary Irritant Effects: Harmful if ingested.

On the skin: Material is irritating to skin and mucous membranes.

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Section 12: Ecological Information

Data not yet available.

Section 13: Disposal Considerations

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

Observe all federal, state and local environmental regulations.

Section 14: Transport Information

Not dangerous goods. Safe for all transport.

Section 15: Regulatory information

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: Other Information

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Material Safety Data Sheet

Section 1: Chemical Identification

Name: Free Dye (AFC) (8mM)

Catalog #: a component of products Cat# 786-200 to 786-205 indicated above.

Section 2: Composition/Information on Ingredients

Not available. Dilute solution of dye AFC.

Section 3: Hazards Identification

Label precautionary statements. Irritating to eyes, respiratory system, and, skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 4: First-Aid Measures

After eye contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

After skin contact: Immediately wash skin with soap and copious amounts of water.

After Inhalation: None needed

After swallowing: Wash out mouth with water provided person is conscious.

Call a physician. Wash contaminated clothing before reuse.

Section 5: Fire Fighting Measures

Extinguishing Agents:

Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedures:

Unusual fire and explosions hazards:

Section 6: Accidental Release Measures

Human Safety Precautions:

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal.

Section 7: Handling and Storage

Refer to section 8.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment:

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

General Protective and Hygiene Measures:

Mechanical exhaust required. None needed

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Green

Odor: None

Section 10: Stability and Reactivity

Thermal Decomposition/Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions known.

Dangerous Products of Decomposition: No known dangerous decomposition products.

Section 11: Toxicological Information

Acute Effects/Toxicity:

Primary Irritant Effects: Harmful if ingested.

On the skin: Material is irritating to skin and mucous membranes.

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Section 12: Ecological Information

Data not yet available.

Section 13: Disposal Considerations

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

Observe all federal, state and local environmental regulations.

Section 14: Transport Information

Not dangerous goods. Safe for all transport.

Section 15: Regulatory information

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: Other Information

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Material Safety Data Sheet**Section 1: Chemical Identification**

Name: Inhibitor (Z-VAD-FMK) (1mM)

Catalog #: a component of products Cat.# 786-200 -- 786-205 indicated above.

Section 2: Composition/Information on Ingredients

Not available. Dilute solution of peptide derivative Z-VAD

Section 3: Hazards Identification

Label precautionary statements. Irritating to eyes, respiratory system, and, skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 4: First-Aid Measures

After eye contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

After skin contact: Immediately wash skin with soap and copious amounts of water.

After Inhalation: None needed

After swallowing: Wash out mouth with water provided person is conscious.

Call a physician. Wash contaminated clothing before reuse.

Section 5: Fire Fighting Measures

Extinguishing Agents:

Water spray, Carbon dioxide, dry chemical powder or appropriate foam.

Section 6: Accidental Release Measures

Human Safety Precautions:

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal.

Ventilate area and wash spill site after material pickup is complete.

Section 7: Handling and Storage

Refer to section 8.

Section 8: Exposure Controls/Personal Protection

Personal protective equipment:

Chemical safety goggles, compatible chemical-respirator, NIOSH/MSHA-approved respirator, and safety shower and eye bath.

General Protective and Hygiene Measures:

Mechanical exhaust required.

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Clear

Odor: None

Section 10: Stability and Reactivity

Thermal Decomposition/Conditions to be avoided:

No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions known.

Dangerous Products of Decomposition: No known dangerous decomposition products.

Section 11: Toxicological Information

Acute Effects/Toxicity:

Primary Irritant Effects: Harmful if ingested.

On the skin: Material is irritating to skin and mucous membranes.

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Section 12: Ecological Information

Data not yet available.

Section 13: Disposal Considerations

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

Observe all federal, state and local environmental regulations.

Section 14: Transport Information

Not dangerous goods. Safe for all transport.

Section 15: Regulatory information

Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. G-Biosciences shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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