

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

Contact Number 1-800-628-7730

[LU 05.19.08]

To review on or before: 05.18.09

Product: PAGE-Perfect™

for Research Use Only

Components

Cat# 786-123

Cat#: 786-123T

UPPA-I (Universal Protein Precipitation Agent-I)	15ml	2ml
UPPA-II (Universal Protein Precipitation Agent-II)	15ml	2ml
Orgosol™ Buffer	50ml	5ml
PAGE-Wash	2.0ml	2ml
SEED	300µl	300µl
PAGE-Perfect™ Buffer-I	2.0ml	2.0ml
SDS-PAGE Sample Loading Buffer [2X]	2.5ml	500µl

Material Safety Data Sheet

Section 1: Chemical Identification

Name: Universal Protein Precipitation Agent-I (UPPA-I)

Catalog #: a component of product Cat # 786-123 and 786-123T indicated above.

Section 2: Composition/Information on Ingredients

Contains- Trichloroacetic acid [CAS# 76-03-9] <10% and non-hazardous addition of salts in DI water

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 for non-volatile items. For items emitting vapor and dust particles: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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: None Needed

Unusual fire and explosions hazards: None known

Section 6: Accidental Release Measures

Human Safety Precautions: Wear chemical safety goggles, rubber boots and heavy rubber gloves.

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. 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: Avoid contact with eyes, skin, and clothing. Wash hands 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

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.

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

Contact *G-Biosciences* for transportation information.

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

For Research Use Only

Name: Universal Protein Precipitation Agent-II (UPPA-II)

Catalog #: a component of product Cat # 786-123 and 786-123T indicated above.

Section 2: Composition/Information on Ingredients

Contains: Sodium carbonate [CAS# 497-19-8] <5%, Sodium chloride [CAS# 7647-14-5] <5% with non-hazardous addition of salts in DI water

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 for non-volatile items. For items emitting vapor and dust particles: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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: None Needed

Unusual fire and explosions hazards: None known

Section 6: Accidental Release Measures

Human Safety Precautions: Wear chemical safety goggles, rubber boots and heavy rubber gloves.

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

Primary Irritant Effects: Harmful if inhaled or ingested.

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

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

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

Contact *G-Biosciences* for transportation information.

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

For Research Use Only

Name: Orgosol™ Buffer

Catalog #: a component of product Cat # 786-123 and 786-123T indicated above.

Section 2: Composition/Information on Ingredients

Contains- Acetone [CAS# 67-64-1] >80% with non-hazardous addition of salts

Section 3: Hazards Identification

Label precautionary statements. Highly Inflammable

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

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: None Needed

Unusual fire and explosions hazards: None known

Section 6: Accidental Release Measures

Human Safety Precautions: Wear chemical safety goggles, rubber boots and heavy rubber gloves.

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

Primary Irritant Effects: Harmful if inhaled or ingested.

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

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

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

Contact *G-Biosciences* for transportation information.

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

For Research Use Only

Name: PAGE-Wash

Catalog #: a component of product Cat # 786-123 and 786-123T indicated above.

Section 2: Composition/Information on Ingredients

Contains- Sodium carbonate [CAS# 497-19-8] <5%, Sodium chloride [CAS# 7647-14-5] <5% with non-hazardous addition of salts in DI water

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 for non-volatile items. For items emitting vapor and dust particles: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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: None Needed

Unusual fire and explosions hazards: None known

Section 6: Accidental Release Measures

Human Safety Precautions: Wear chemical safety goggles, rubber boots and heavy rubber gloves.

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

Primary Irritant Effects: Harmful if inhaled or ingested.

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

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

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

Contact *G-Biosciences* for transportation information.

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

For Research Use Only

Name: SEED

Catalog #: a component of product Cat # 786-123 and 786-123T indicated above.

Section 2: Composition/Information on Ingredients

This product does not contain any hazardous ingredients requiring reporting in this section in accordance with national regulations.

To the best our knowledge this component preparation is not classified as hazardous according to national regulations

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Clear

Odor: None

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

For Research Use Only

Name: PAGE-Perfect™ Buffer-I

Catalog #: a component of product Cat # 786-123 and 786-123T indicated above.

Section 2: Composition/Information on Ingredients

Contains- Sodium hydroxide [CAS# 1310-73-2] <5% with non-hazardous addition 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: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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: None Needed

Unusual fire and explosions hazards: None known

Section 6: Accidental Release Measures

Human Safety Precautions: Wear chemical safety goggles, rubber boots and heavy rubber gloves.

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

Primary Irritant Effects: Harmful if inhaled or ingested.

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

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

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

Contact *G-Biosciences* for transportation information.

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

For Research Use Only

Name: SDS-PAGE Sample Loading Buffer [2X]

Catalog #: a component of product Cat # 786-123 and 786-123T indicated above.

Section 2: Composition/Information on Ingredients

Contains- Tris (hydroxymethyl) aminomethane [CAS# 77-86-1] <5%, Sodium Dodecyl Sulfate [CAS#

151-21-3] <5%, non-hazardous addition of salts, Bromophenol blue [CAS# 62625-28-9] 0-1%

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

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: None Needed

Unusual fire and explosions hazards: None known

Section 6: Accidental Release Measures

Human Safety Precautions: Wear chemical safety goggles, rubber boots and heavy rubber gloves.

Cleaning/Collecting Measures: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. 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 hands thoroughly after handling. Irritant. Keep tightly closed. Store in a cool dry place.

Section 9: Physical and Chemical Properties

Form: Liquid

Color: Blue

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

Primary Irritant Effects: Harmful if inhaled or ingested.

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

On the eye: Causes eye irritation.

Sensitization: No sensitizing effects known.

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 Contact *G-Biosciences* for transportation information.

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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