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**Product:** XIT™ Genomic DNA from Yeast kit      **Catalog #:** 786-348 & 786-349      [LU 04.02.09-IA/JK]

<b>KIT COMPONENTS</b>	<b>Cat # 786-348 For 25ml Culture</b>	<b>Cat # 786-349 For 250ml Culture</b>
XIT™ Cell Suspension Buffer	10ml	100ml
XIT™ Lysis Buffer	10ml	100ml
LongLife™ Zymolyase®	0.5ml	3 x 0.5ml
XIT™ Protein Precipitation Buffer	2.5ml	25ml
TE Buffer	1.5ml	20ml
LongLife™ RNase	0.5ml	0.5ml

## **Material Safety Data Sheet**

### **Section 1: Chemical Identification**

**Name:** XIT™ Cell Suspension Solution

**Catalog #:** a component of product Cat# 786-348 & 786-349 indicated above

### **Section 2: Composition/Information on Ingredients**

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:** 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:** Not known

### **Section 6: Accidental Release Measures**

**Human Safety Precautions:** Chemical safety goggles, rubber boots and rubber gloves.

**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 Hygienic Measures:** 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**

**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**

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. Genotech / 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:** XIT<sup>TM</sup> Lysis Buffer

**Catalog #:** a component of product Cat.# 786-348 & 786-349 as indicated above

### **Section 2: Composition/Information on Ingredients**

Contains: Sodium Chloride [CAS#7647-14-5] <7%; Tris-Hcl [CAS#1185-53-1] <1%; Ethylene diamine tetraacetic acid, EDTA [CAS#6381-92-6] <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. Wash contaminated clothing before reuse.

**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.

### **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:** Not known

## **Section 6: Accidental Release Measures**

**Human Safety Precautions:** Chemical safety goggles, rubber boots and rubber gloves.

**Cleaning/Collecting Measures:** Mop 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 Hygienic Measures:** 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**

**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**

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:** LongLife™ Zymolyase®

**Catalog #:** a component of product Cat.# 786-348 & 786-349 indicated above.

#### **Section 2: Composition/Information on Ingredients**

Stabilized Zymolyase protein in suspension.

#### **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:** Not known

**Section 6: Accidental Release Measures**

**Human Safety Precautions:** Chemical safety goggles, rubber boots and rubber gloves.

**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:** Cloudy

**Odor:** None

**Section 10: Stability and Reactivity**

**Thermal Decomposition/Conditions to be Avoided:** No decomposition if used according to specifications. Avoid prolonged exposure to air or moisture, strong oxidizing agents, heat.

**Dangerous Reactions:** No dangerous reactions known.

**Dangerous Products of Decomposition:** Carbon oxides.

**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**

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:** *XIT*<sup>TM</sup> Protein Precipitation Buffer

**Catalog #:** a component of product Cat.# 786-348 & 786-349 indicated above

### **Section 2: Composition/Information on Ingredients**

Contains: Sodium Chloride [CAS#7647-14-5] <30%

### **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. Wash contaminated clothing before reuse.

**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.

#### **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:** Not known

#### **Section 6: Accidental Release Measures**

**Human Safety Precautions:** Chemical safety goggles, rubber boots and rubber gloves.

**Cleaning/Collecting Measures:** Mop 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 Hygienic Measures:** 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**

**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**

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:** TE Buffer

**Catalog #:** a component of product Cat.# 786-348 & 786-349 indicated above.

**Section 2: Composition/Information on Ingredients**

Contains 12.21% Tris [CAS# 77-86-1] and 3.7% Ethylene diamine tetracetic acid; EDTA [CAS# 6381-92-6] 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. Wash contaminated clothing before reuse.

**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.

#### **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:** Not known

#### **Section 6: Accidental Release Measures**

**Human Safety Precautions:** Chemical safety goggles, rubber boots and rubber gloves.

**Cleaning/Collecting Measures:** Mop 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 Hygienic Measures:** 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**

**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**

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:** Longlife™ RNase

**Catalog #:** a component of product Cat.# 786-348 & 786-349 as indicated above.

**Section 2: Composition/Information on Ingredients**

Stabilized preparation of RNase enzyme, CAS# 9001-99-4

**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. Wash contaminated clothing before reuse.

**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.

#### **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:** Not known

#### **Section 6: Accidental Release Measures**

**Human Safety Precautions:** Chemical safety goggles, rubber boots and rubber gloves.

**Cleaning/Collecting Measures:** Mop 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 Hygienic Measures:** 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**

**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**

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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