1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Cell-Based ELISA Kits
Catalog number: CB-XXXX, CBP-XXXX
Recommended use: Research use only
Supplier address: Assay Biotechnology Co.
47787 Fremont Blvd
Fremont, CA 94538
USA
Tel: 1-408-747-0185 or 408-747-0189
Fax: 1-408-747-0145

E-mail address: tech@assaybiotech.com

Emergency telephone number: Tel: 1 (703) 527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Potential hazards:
Some kit reagents are not considered to be hazardous according to 29CFR 1910.1200(d). They are mixtures that contain less than 1% hazardous chemicals and less than 0.1% carcinogenic chemicals. All potential hazards are listed below:

- **α-target antibody, α-phospho-target antibody, α-GAPDH antibody**: < 0.1% Sodium azide

- **10X TBS**: 1% Kathon CG/ICP
- **15X Wash buffer**: 0.3% Kathon CG/ICP, 1.5% Tween-20
- **HRP-conjugated antibodies**: 0.2% Kathon CG/ICP, 0.1% Tween-20
- **SDS solution**: 1% Sodium Dodecyl Sulfate (SDS)
- **Blocking buffer**: 0.5% Triton X-100, 0.1% Tween-20
- **Primary antibody diluent**: 1% Kathon CG/ICP, 0.5% Triton X-100, 0.1% Tween-20
**Quenching buffer:** 1% Hydrogen peroxide (H$_2$O$_2$)

**Crystal violet solution:** 0.05% crystal violet

**Ready-to-use substrate:** < 0.02% hydrogen peroxide and < 0.1% 3,3',5,5'‐Tetramethylbenzidine (TMB)

**Stop solution:** 2N Sulfuric acid (H$_2$SO$_4$)

**Classification of the substance or mixture**

**Crystal violet:** Carcinogen (2); Eye and skin irritant; Flammable liquid; Toxic by inhalation, ingestion, and skin absorption; Organ Damage (Eyes, Heart, Kidney, Liver, Nerves).

**Hydrogen peroxide:** Carcinogen; Corrosive; Flammable Oxidizer; Organ Damage (Eyes, Respiratory system, Skin); Toxic by ingestion.

**Kathon CG:** Carcinogen; Corrosive; Flammable Oxidizer; Harmful by ingestion; Harmful if inhaled and extremely destructive of tissues of mucous membranes and upper respiratory tract; Organ Damage (Blood, Central Nervous System, Eye, Gastrointestinal tract, Kidney); Skin and respiratory sensitizer (causes allergies).

**SDS:** Flammable Solid; Organ Damage (Eyes and Lungs); Skin Irritant; Toxic by ingestion and skin absorption.

**Sodium azide:** May react with lead and copper plumbing to form highly explosive metal azides; Highly toxic by ingestion and skin absorption; Organ Damage (Brain, Central nervous system, Heart).

**Sulfuric acid:** Corrosive; Organ Damage (Eyes, Lungs, and Teeth).

**Triton X-100:** Toxic by ingestion; Organ Damage (Eyes); Skin Irritant.

**Tween-20:** Toxic by inhalation, ingestion, and skin absorption. May cause eye, skin, or respiratory system irritation.

**GHS label elements, including precautionary statements**

**Hazard pictograms**

- !: Warning
- Person with exclamation mark: Danger
- Flame: Danger
- Chemical symbol: Danger

**Signal word/s**

- Warning
- Danger
- Danger
- Danger

**Hazard statements**

Keep away from clothing and combustible materials. Avoid breathing the fumes and vapors from kit components. Wear protective gloves, clothing, eyewear, and face mask.
**Routes of entry:** Avoid ingestion and inhalation; avoid contact with skin and eyes.

**Threshold limit value and source:** The chemical, physical and toxicological properties of these components have not been thoroughly investigated. Allergy-prone individuals should be particularly cautious with proteins or other materials of biological origin.

**Carcinogenic effects data:** Not available

**Chronic effects of overexposure:** Not available

**Solubility in water:** Liquids except detergents are readily miscible in water.

**Hazards not otherwise classified (HNOC) or not covered by GHS –** none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**CAS numbers/other identifiers**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Kathon CG/ICP</td>
<td>7664-93-9</td>
<td>2.5</td>
</tr>
<tr>
<td>Tween-20</td>
<td>7732-18-5</td>
<td>1.8</td>
</tr>
<tr>
<td>Sodium Dodecyl Sulfate (SDS)</td>
<td>151-21-3</td>
<td>1</td>
</tr>
<tr>
<td>Triton X-100</td>
<td>9002-93-1</td>
<td>1</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>1</td>
</tr>
<tr>
<td>Crystal violet</td>
<td>548-62-9</td>
<td>0.05</td>
</tr>
<tr>
<td>3,3',5,5'-Tetramethylbenzidine (TMB)</td>
<td>54827-17-7</td>
<td>0.1</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>7664-93</td>
<td>&lt;2</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**Eye contact**
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

**Skin contact**
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Inhalation**
Move to fresh air

**Ingestion**
Clean mouth with water. Drink plenty of water.

**Notes to physician**
Treat symptomatically.

### 5. FIREFIGHTING MEASURES
Flammable properties
Not flammable

Flash point
No determined

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Explosion Data
Sensitivity to mechanical Impact
None

Sensitivity to static discharge
None

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation.

Environmental precautions
Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up
Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Handling
Handle in accordance with good industrial hygiene and safety practice.

Storage
Store the entire kit at 4°C upon arrival.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering measures
Showers
Eyewash stations
Ventilation systems

**Personal protective equipment**

**Eye/face protection**
No special protective equipment required.

**Skin protection**
No special protective equipment required.

**Body protection**
No special protective equipment required.

**Respiratory protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

- **Appearance**
  Form: liquid
- **Odour**
  No data available
- **Odour 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 (solid, gas)**
  No data available
- **Upper/lower flammability or explosive limits**
  No data available
- **Vapour pressure**
  No data available
- **Vapour density**
  No data available
- **Relative density**
  No data available
- **Water 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
- ** Explosive properties**
  No data available
- **Oxidizing properties**
  No data available

10. **STABILITY AND REACTIVITY**

**Stability**
Stable under recommended storage conditions.
Incompatible products
None known based on information supplied.

Conditions to avoid
None known based on information supplied.

Hazardous decomposition products
None known based on information supplied.

Hazardous polymerization
Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Inhalation: No data available
Dermal: No data available

   Skin corrosion/irritation
   No data available

   Serious eye damage/eye 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

Aspiration hazard
No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

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

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

**DOT (US)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

15. REGULATORY INFORMATION

**U.S. federal regulations**

**SARA 302/313 components**
The following components are subject to reporting levels established by SARA Title III, Section 302/313:

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**SARA 311/312 hazard categories**

- **Acute health hazard** no
- **Chronic health hazard** no
- **Fire hazard** no
- **Sudden release of pressure hazard** no
- **Reactive hazard** no

**Clean water act**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.
California proposition 65
This product does not contain any Proposition 65 chemicals.

16. OTHER INFORMATION

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.