

Product Name: Human CD40 Ligand/TNFSF5 Magnetic Luminex Performance Assay

Reviewed on: 31 March 2017

### 1. Identification of Substance:

- **Other means of identification: Catalog Number:** LUBM201
- Contains: Microparticle Concentrate (contains Sodium azide), Biotin-Antibody Concentrate (contains ProClin 300).
- **GHS product identifier:** Human CD40 Ligand/TNFSF5 Magnetic Luminex Performance Assay
- **Application of the substance / the preparation:** For Research Use Only
- **Manufacturer/Supplier:**  
Bio-Techne - R&D Systems Inc.  
614 McKinley Place N.E.  
Minneapolis, MN 55413 USA  
1-800-343-7475
- **For product related questions call:** 1-800-343-7475. In Europe call: +44(0)1235-529449.

### 2. Hazard Identification:

**Classification:** This substance does not meet the classification criteria to be listed as a hazardous material according to the **Regulation (EC) No. 1272/2008 (CLP/EU-GHS), 29 CFR 1910.1200 (OSHA):** Contains Sodium Azide (less than 0.1%) – not a hazardous substance at this concentration.

- **Pictogram:** none
- **Signal Word:** none
- **Hazard statements:** none
- **Precautionary statements:** none
- **Response:** not needed
- **Hazard Symbol / R-Phrase / S-Phrase:** None
- **Label Elements:** The product does not need to be labeled in accordance with EC directives CLP/GHS directives or respective national laws.
- **Special Hazards:** None

### 3. Information on Ingredients:

Contains: Sodium Azide

Contains	CAS No.	EC-No.	Index-No.	Content
Sodium Azide	26628-22-8	247-852-1	011-004-00-7	<0.1% Not hazardous at this concentration

### 4. First Aid Measures:

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly. Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 5. Fire Fighting Measures:

- **Suitable extinguishing agents:** Use water spray or extinguishing measure that is appropriate to local circumstances and the surrounding environment.
- **Hazards from the substance or mixture:** Sodium oxides.
- **Special precautions for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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- **Other information:** This product does not burn.

## 6. Accidental Release Measures:

- **Person-related safety precautions:** Use standard laboratory practices and appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- **Measures for environmental protection:** Keep away from drains.
- **Measures for containment and cleaning:** Soak up with inert absorbent material and dispose of as per section 13. Keep in suitable, closed containers for disposal.
- **Additional information:** None.

## 7. Handling and Storage:

- **Precautions for safe handling:** Avoid inhalation of vapor or mist. Avoid contact with eyes and skin. No special precautions are necessary if used correctly.
- **Conditions for safe storage:** Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store in incompatible containers.

## 8. Exposure Controls and Personal Protection:

- **Control parameters:** None known.
- **Appropriate engineering controls:** Use with adequate ventilation including local extraction. Ensure that eyewash stations and safety showers are close to the workstation location. Follow standard laboratory practices.
- **Individual protection measures:** Wash hands thoroughly after handling chemical products and before eating, smoking or using the restroom. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

**Eye/face protection:** Wear approved safety goggles.

**Skin/hand protection:** Handle with protective gloves, plastic or rubber. 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.

**Body protection:** Wear suitable protective clothing as protection against splashing or contamination.

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection:** In case of inadequate ventilation, use a suitable respirator. 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).

## 9. Physical and Chemical Properties:

▪ <b>Appearance:</b> Lyophilized white powder or clear liquid.	▪ <b>Upper/lower flammability or explosive limits:</b> Not available.
▪ <b>Odor:</b> Little to none	▪ <b>Vapor pressure/density:</b> Not available.
▪ <b>Odor threshold:</b> Not available	▪ <b>Relative Density:</b> Not available.
▪ <b>pH:</b> Not available	▪ <b>Solubility in/Miscibility with Water:</b> Not available.
▪ <b>Melting point/freezing point:</b> Not available.	▪ <b>Partition coefficient: noctanol/water:</b> Not available
▪ <b>Boiling point/Boiling range:</b> Not available.	▪ <b>Auto igniting:</b> Product is not self igniting.

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▪ <b>Flash point:</b> Not available.	▪ <b>Decomposition temperature:</b> Not available.
▪ <b>Evaporation rate:</b> Undetermined.	▪ <b>Viscosity:</b> Not available.
▪ <b>Flammability:</b> Not available.	

## 10. Stability and Reactivity:

- **Reactivity:** No data available
- **Chemical Stability:** Stable under recommended storage conditions.
- **Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.
- **Conditions to avoid:** Hydroxides, amines, alkalis and metals.
- **Incompatible materials:** Hydroxides, amines, alkalis or metals such as copper, brass, zinc, potassium and sodium should be avoided.
- **Hazardous decomposition products:** Products formed under fire conditions: toxic gasses and vapors such as chlorine.

## 11. Toxicological Information:

- **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:** IARC: No data available.
- **Reproductive toxicity:** No data available.
- **Specific target organ toxicity (STOT) -** No data available
- **Specific target organ toxicity (STOT) -repeated exposure:** No data available
- **Aspiration hazard:** No data available.
- **Information on likely routes of exposure:** Routes of entry anticipated; oral, dermal, inhalation.
- **Symptoms related to the physical, chemical and toxicological characteristics:**
  - Inhalation:** No data available.
  - Ingestion:** No data available.
  - Skin contact:** No data available.
  - Eye contact:** May cause eye burns.
- **Delayed and immediate effects and also chronic effects from short and long term exposure:**
  - Short term exposure: Potential immediate effects:** No data available.
  - Potential delayed effects:** No data available.
  - Long term (chronic) exposure: Potential immediate effects:** No data available.
- **Potential delayed effects:** No data available.
- **Numerical measures of toxicity:** No data available.
- **Other Information:** No data available.

## 12. Ecological Information:

- **Ecotoxicity:** No data available..
- **Biodegradability:** No data available.
- **Bioaccumulative potential:** No data available.
- **Mobility in soil:** No data available.
- **Other adverse effects:** No data available.

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### 13. Disposal Considerations:

- **Disposal methods:** Dispose of waste in accordance to applicable national, regional, or local regulations. This material may be handled as hazardous waste by a licensed disposal company.
- **Contaminated packaging:** Dispose in the same manner as unused product.
- **Special precautions:** Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilled material to soil, waterways, drains and sewers.

### 14. Transportation Information:

- **ADR/RID ADN/ADNR IMDG IATA/DOT:** Not regulated.
- **UN Number:** None
  
- **DOT regulations:** ·Hazard class: None
- **Land transport ADR/RID (cross-border):** Not regulated.
- **Maritime transport IMDG:** Not regulated.
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:** Not regulated.
- **Transport/Additional information:** Not dangerous according to the above specifications.

### 15. Regulations:

- **US Federal and State Regulations**
  - TSCA (Toxic Substances Control Act): Not listed.
  - SARA 313 Components: Not listed
  - SARA 311/312 Hazards: Not listed.
  - CERCLA Reportable Quantity: Not listed.
  - California Proposition 65: Not listed.
- This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

### 16. Other Information:

- **Notice to reader:** To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

### 2. Hazard Identification:

- **Classification:** This substance does not meet the classification criteria to be listed as a hazardous material according to the **Regulation (EC) No. 1272/2008 (CLP/EU-GHS), 29 CFR 1910.1200 (OSHA):** Contains ProClin 300 (less than 0.01%) – not a hazardous substance at this concentration.
- **Pictogram:** none
- **Signal Word:** none
- **Hazard statements:** none
- **Precautionary statements:** none
- **Response:** not needed

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- **Hazard Symbol / R-Phrase / S-Phrase:** None
- **Label Elements:** The product does not need to be labeled in accordance with EC directives CLP/GHS directives or respective national laws.
- **Special Hazards:** None

### 3. Information on Ingredients:

Description: ProClin 300

Contains	CAS No.	EC-No.	Index-No.	Content
Mixture of 5-Chloro-2-Methyl-4-Isothiazolin-3-One (26172-55-4) and 2-Methyl-4-Isothiazolin-3-One (2682-20-4)	55965-84-9	-	613-167-00-5	<0.01%

### 4. First Aid Measures:

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly. Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 5. Fire Fighting Measures:

- **Suitable extinguishing agents:** Use water spray or extinguishing measure that is appropriate to local circumstances and the surrounding environment.
- **Hazards from the substance or mixture:** Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.
- **Special precautions for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
- **Other information:** This product does not burn.

### 6. Accidental Release Measures:

- **Person-related safety precautions:** Use standard laboratory practices and appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- **Measures for environmental protection:** Keep away from drains.
- **Measures for containment and cleaning:** Soak up with inert absorbent material and dispose of as per section 13. Keep in suitable, closed containers for disposal.
- **Additional information:** None.

### 7. Handling and Storage:

- **Precautions for safe handling:** Avoid inhalation of vapor or mist. Avoid contact with eyes and skin. No special precautions are necessary if used correctly.
- **Conditions for safe storage:** Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store in incompatible containers.

### 8. Exposure Controls and Personal Protection:

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- **Control parameters:** None known.
- **Appropriate engineering controls:** Use with adequate ventilation including local extraction. Ensure that eyewash stations and safety showers are close to the workstation location. Follow standard laboratory practices.
- **Individual protection measures:** Wash hands thoroughly after handling chemical products and before eating, smoking or using the restroom. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

**Eye/face protection:** Wear approved safety goggles.

**Skin/hand protection:** Handle with protective gloves, plastic or rubber. 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.

**Body protection:** Wear suitable protective clothing as protection against splashing or contamination.

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection:** In case of inadequate ventilation, use a suitable respirator. 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).

## 9. Physical and Chemical Properties:

▪ <b>Appearance:</b> Clear Liquid	▪ <b>Upper/lower flammability or explosive limits:</b> Not available
▪ <b>Odor:</b> Not available	▪ <b>Vapor density:</b> Not available
▪ <b>Odor threshold:</b> Not available	▪ <b>Vapor pressure:</b> Not available
▪ <b>pH:</b> Not available	▪ <b>Relative density:</b> Not available
▪ <b>Melting point/freezing point:</b> Not available	▪ <b>Solubility in/Miscibility with Water:</b> Soluble
▪ <b>Boiling point/Boiling range:</b> Not available	▪ <b>Partition coefficient: noctanol/water:</b> Not available
▪ <b>Flash point:</b> Not available	▪ <b>Auto igniting:</b> Not available
▪ <b>Evaporation rate:</b> Not available	▪ <b>Decomposition temperature:</b> Not available
▪ <b>Flammability (solid, gas):</b> Not available	▪ <b>Viscosity:</b> Not available

## 10. Stability and Reactivity:

- **Reactivity:** No data available
- **Chemical Stability:** Stable under recommended storage conditions.
- **Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.
- **Conditions to avoid:** Strong oxidizing agents, reducing agents, Amines, Mercaptans.
- **Incompatible materials:** Hydroxides, amines, alkalis or metals such as copper, brass, zinc, potassium and sodium should be avoided.
- **Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions – Carbon oxides, nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride gas.

## 11. Toxicological Information:

- **Acute toxicity:** No data available.
- **Skin corrosion/irritation:** No data available.
- **Serious eye damage/irritation:** No data available.
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### 14. Transportation Information:

- **ADR/RID ADN/ADNR IMDG IATA/DOT:** Not regulated.
- **UN Number:** None
- **DOT regulations:** ·Hazard class: None
- **Land transport ADR/RID (cross-border):** Not regulated.
- **Maritime transport IMDG:** Not regulated.
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:** Not regulated.
- **Transport/Additional information:** Not dangerous according to the above specifications.

### 15. Regulations:

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- **US Federal and State Regulations**
  - TSCA (Toxic Substances Control Act): Not listed.
  - SARA 313 Components: Not listed
  - SARA 311/312 Hazards: Not listed.
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  - California Proposition 65: Not listed.
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