MitoTracker® Red CMXRos

**Store at -20°C**

**500 µg**
(10 x 50 µg)

**Description:** MitoTracker® Red CMXRos is well retained after fixation allowing for further sample processing and immunostaining.

Excitation: 579 nm
Emission: 599 nm

**Background:** MitoTracker® dyes are cell permeable probes that contain a mildly thiol-reactive chloromethyl moiety for mitochondrial labeling. To label mitochondria, cells are simply incubated with MitoTracker® probes, which passively diffuse across the plasma membrane and accumulate in active mitochondria.

**Directions for Use:** Each vial of MitoTracker® Red CMXRos contains 50 µg lyophilized solid. To make a 1 mM stock solution, reconstitute the solid in 94.1 µl high quality DMSO. While the optimal staining concentration and incubation times can vary by application, typical results are obtained by diluting the stock solution directly into growth media at a concentration between 50-200 nM and incubation between 15-45 min at 37°C. After incubation, fix the cells in ice-cold methanol for 15 min at -20°C then rinse 3 times with PBS for 5 min. Proceed with immunostaining.

**Applications**

<table>
<thead>
<tr>
<th>IF-IC</th>
<th>Species Cross-Reactivity</th>
<th>Molecular Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>All</td>
<td>531.52 g/mol</td>
</tr>
</tbody>
</table>

**HeLa**

Confocal immunofluorescent analysis of HeLa cells using MitoTracker® Red CMXRos (red) and Lamin A/C (4C11) Mouse mAb (Alexa Fluor® 488 Conjugate) #8617 (green). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

**Storage:** Store lyophilized solid at -20°C dessicated and protected from light. In lyophilized form, this reagent is stable for 12 months. Once reconstituted in DMSO, the solution can be stored at -20°C, protected from light and must be used within 2 weeks. Avoid freeze-thaw cycles.

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Mito Tracker Red CMXRos
Product Number: 9882
Identified Uses: For Research Use Only (RUC). Not intended for use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology, Inc.
3 Trewell Lane
Danvers, MA 01923 USA
Phone #: 978-857-2300

2. HAZARDS IDENTIFICATION

Emergency Overview
This product contains no substances which at their given concentration are considered to be hazardous to health.

Physical State: Solid

Potential Health Effects

Acute Toxicity

<table>
<thead>
<tr>
<th>Route</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
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</tr>
<tr>
<td>Skin</td>
<td>No information available</td>
</tr>
<tr>
<td>Ingestion</td>
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Chronic Effects

<table>
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<tr>
<td>Carcinogenic effects</td>
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<td>No information available</td>
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<tr>
<td>Reproductive toxicity</td>
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<td>Sensitization</td>
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<tr>
<td>Target organ effects</td>
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients
This product contains no substances which at their given concentration are considered to be hazardous to health.

4. FIRST AID MEASURES

Eye Contact: Rinse immediately with plenty of water.
Skin Contact: Rinse immediately with soap and plenty of water.
Inhalation: Move to fresh air.
Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE FIGHTING MEASURES

Flash Point: See Section 9, Physical and Chemical Properties
Suitable Extinguishing Media: Use dry chemical
Special exposure hazards: No data available
Special protection for fire fighters: Wear self-contained breathing apparatus and protective unit
Other information: No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with clothing, eyes and skin.
Environmental precautions: Prevent further leakage or spillage if safe to do so.
Clean up methods: Soak up with absorbent material. Keep in suitable closed containers for disposal.
Other information: See sections 12 and 13 for additional information.

7. HANDLING AND STORAGE

Safe handling advice: No special handling advice required.
Storage conditions: Keep container tightly closed.
Incompatibilities: No data available
Specific end uses: No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: None required under normal usage. If exposure limits are exceeded or irritation is experienced, wear suitable respiratory equipment.
Eye/Face Protection: Safety glasses with side shields
Skin and body protection: Wear suitable protective clothing
Hand protection: Protective gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Water Solubility: no data available
Melting point/Freezing point: no data available
Boiling point: no data available
Evaporation rate: no data available
Flash point: no data available
Autoignition temperature: no data available
Flammability limits in air: no data available
Explosive properties: no data available
VOC content: no data available
Decomposition temperature: no data available

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions
Conditions/Materials to avoid: no data available
Hazardous decomposition products: no data available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
No data available
To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

Routes of Exposure

Potential Health Effects

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12. ECOLOGICAL INFORMATION

Ecotoxicity: The environmental impact of this product has not been fully investigated.
Persistence and degradability: No data available
Bioaccumulation: Does not bioaccumulate. Inherently biodegradable.
Mobility: No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose of in accordance with all applicable environmental laws and regulations.

14. TRANSPORT INFORMATION

IATA: Not classified as dangerous in the meaning of transport regulations
DOT: Not classified as dangerous in the meaning of transport regulations
MEX: Not classified as dangerous in the meaning of transport regulations

15. REGULATORY INFORMATION

OSHA Regulatory Status
This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

International Inventories
TSCA -
DSL/INSL -
EINECS/ELINCS -
ENCS -
IECSC -
KECL -
PCCS -
AICS -
N Zac -

U.S. Federal Regulations
SARA 313 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act Amendments of 1990.

U.S. State Regulations
This product does not contain any substances regulated by state right-to-know regulations.

California Proposition 65
This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class
Cell Signaling Technology, Inc.
www.cellsignal.com
Non-controlled
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the
information required by the CPR.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Revision date</th>
<th>2012-06-03</th>
</tr>
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<tbody>
<tr>
<td>Revision Note</td>
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Disclaimer
The information provided on this material safety data sheet is to the best of our knowledge, information and belief at
the date of its publication. The information given is designed only as a guide for safe handling, use, processing,
storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Material Safety Data Sheet