

# UltraCruz<sup>®</sup> Hard-set Mounting Medium with DAPI: sc-359850

## BACKGROUND

UltraCruz<sup>®</sup> Hard-set Mounting Medium is an aqueous based formula designed to preserve fluorescence. UltraCruz<sup>®</sup> Hard-set Mounting Medium inhibits photobleaching of probes containing fluorescein, Texas Red, Rhodamine and other fluorochromes. Cells or tissue sections mounted in UltraCruz<sup>®</sup> Hard-set Mounting Medium hardens when cover-slipped and retains fluorescence during prolonged storage.

## REFERENCES

1. Dey, S., et al. 2009. Cell cycle specific expression and nucleolar localization of human J-domain containing co-chaperone Mrj. *Mol. Cell. Biochem.* 322: 137-142.
2. Walkiewicz, M.A. and Stern, M. 2009. Increased Insulin/insulin growth factor signaling advances the onset of metamorphosis in *Drosophila*. *PLoS ONE* 4: e5072.
3. Gössl, M., et al. 2009. Prevention of vasa vasorum neovascularization attenuates early neointima formation in experimental hypercholesterolemia. *Basic Res. Cardiol.* 104: 695-706.
4. Xi, D., et al. 2009. Dizocilpine (MK-801) induces distinct changes of N-methyl-D-aspartic acid receptor subunits in parvalbumin-containing interneurons in young adult rat prefrontal cortex. *Int. J. Neuropsychopharmacol.* 12: 1395-1408.

## PRODUCT

UltraCruz<sup>®</sup> Hard-set Mounting Medium is supplied as a 10 ml solution containing 1.5 µg/ml of 4',6-diamidino-2-phenylindole (DAPI), which is very useful as a DNA counterstain. This product is designed to be used for *in situ* hybridization techniques or for other procedures requiring fluorescent labeling of DNA. DAPI excites at about 360 nm and emits at about 460 nm when bound to DNA, producing a blue fluorescence. DAPI may also stain RNA.

## PROTOCOL AND USAGE

UltraCruz<sup>®</sup> Hard-set Mounting Medium is supplied in a bottle fitted with a cone-seal cap. The cone-seal cap can be replaced with a drop dispenser cap (not included) for routine use and during storage. It is recommended that once a drop dispenser cap has been secured on the bottle, the bottle should be stored in an upright position.

### ULTRACRUZ<sup>®</sup> HARD-SET MOUNTING MEDIUM PROCEDURE

To mount tissues or cells on a slide, dispense one drop of UltraCruz<sup>®</sup> Hard-set Mounting Medium onto the section.

Then coverslip and allow UltraCruz<sup>®</sup> Hard-set Mounting Medium to disperse over the entire section. Applying an excess of mounting medium is not recommended.

UltraCruz<sup>®</sup> Hard-set Mounting Medium dries completely when slides are cover-slipped. Sections may be viewed immediately using a fluorescent microscope; it takes approximately 15 minutes for the coverslip to become immobilized and will completely harden overnight (at 4° C).

## PROTOCOL AND USAGE CONT.

If air bubbles form, or the DAPI counterstain intensity decreases during prolonged storage, remove coverslip and remount. Coverslips can be easily removed after hardening by soaking in PBS overnight.

### NOTES

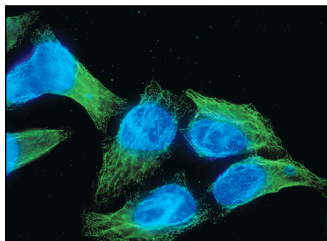
When mounting thick tissue sections, the mounting medium may not harden properly. Use of non-hardening UltraCruz<sup>™</sup> Mounting Medium (sc-24941) may be preferred.

If cells are grown in chamber slides, remove the hydrophobic gasket before mounting or use a coverslip that fits within the gasket.

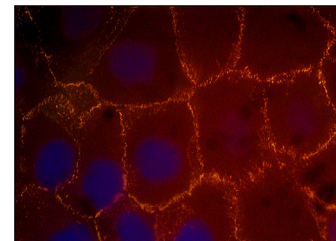
If cells have been fixed in 100% methanol, the nuclear counterstain will diffuse out of nuclei over time. In this case non-hardening UltraCruz<sup>®</sup> Mounting Medium (sc-24941) may be preferred.

Texas Red<sup>®</sup> is a trademark of Molecular Probes, Inc., Oregon, USA (6/02)

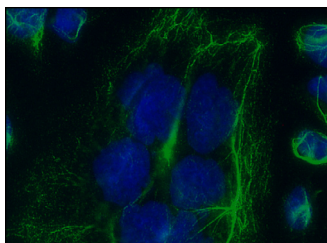
## DATA



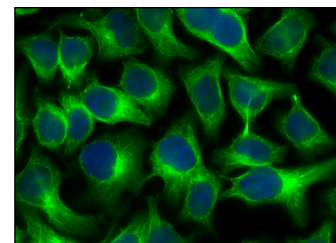
UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. Immunofluorescence staining of methanol-fixed HeLa cells showing fluorescein immunostaining of cytoskeletal-associated nm23 (green) and nuclear DAPI counterstain (blue). Antibody tested: nm23-H1 (NM301): sc-465.



UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. Rhodamine immunofluorescence staining of methanol-fixed A-431 cells showing membrane localization of β-catenin (red) and DAPI nuclear counterstain (blue). Antibody tested: β-catenin (E-5): sc-7963.



UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization of P2X5 (green) and nuclear DAPI counterstain (blue). Antibody tested: P2X5 (H-5): sc-365036.



UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization of α-tubulin (green) and nuclear DAPI counterstain (blue). Antibody tested: α-tubulin (B-7): sc-5286.

## STORAGE

Store at 4° C in the dark; stable for six months from the date of shipment.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 04-Jan-2018

Version 1.1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name UltraCruz® Hard-set Mounting Medium  
Product Code SC-359850

### Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

### Details of the supplier of the safety data sheet

Santa Cruz Biotechnology, Inc.  
10410 Finnell Street  
Dallas, TX 75220  
831.457.3800  
800.457.3801  
scbt@scbt.com

### Emergency telephone number

Chemtrec  
1.800.424.9300 (Within USA)  
+1.703.527.3887 (Outside USA)

## 2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

### Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

Signal word Not classified  
Hazard statements Not classified  
Symbols/Pictograms Not classified

Precautionary Statements - Prevention Wash hands thoroughly after handling  
Precautionary Statements - Response IF exposed or concerned: Get medical advice/attention

### Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) Not applicable

### Other Information

Unknown acute toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity.

<b>NFPA</b>	Health hazards	-		<b>HMS</b>	Health hazards	-
	Flammability	-			Flammability	-
	Stability	-			Physical hazards	-
	Physical and chemical properties	-			Personal protection	-

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Weight No information available  
Formula No information available

Chemical Name	CAS No	Weight %	Oral LD50	Dermal LD50	Inhalation LC50
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UltraCruz® Hard-set Mounting Medium	-	>98	-	-	-
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#### 4. FIRST AID MEASURES

##### First Aid Measures

General advice	Immediate medical attention is required.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.
Skin Contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation	Immediate medical attention is required Remove to fresh air If not breathing, give artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

##### Most important symptoms and effects, both acute and delayed

Symptoms No information available.

##### Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	None.

##### Specific hazards arising from the chemical

Specific hazards arising from the chemical	No information available.
Hazardous combustion products	No information available.

##### Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

##### Protective equipment and precautions for firefighters

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

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

##### Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

Methods for containment	Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up	Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

Advice on safe handling	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.
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**Conditions for safe storage, including any incompatibilities**

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store at 4 °C.
Incompatible materials	None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Exposure Guidelines	.
Other Information	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

Engineering Controls	Showers Eyewash stations Ventilation systems
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**Individual protection measures, such as personal protective equipment**

Eye/face protection	Tight sealing safety goggles.
Skin and Body Protection	Wear protective gloves and protective clothing.
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.
General Hygiene Considerations	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State	liquid
Appearance	No information available
Odor	No information available

**Property**

<b>Values</b>	
pH	No information available
Melting point/freezing point	No information available
Boiling point	No information available

Flash point	No information available
Density	No information available
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

## 10. STABILITY AND REACTIVITY

Reactivity	Not applicable
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

### Information on toxicological effects

Symptoms	No information available.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	No information available.
Target Organ Effects	Eyes, Respiratory system, Kidney, Skin.

### Numerical measures of toxicity - Product Information

Unknown acute toxicity	100% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document	
ATEmix (oral)	90000
ATEmix (dermal)	71429
ATEmix (inhalation-vapor)	4071

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	May cause long lasting harmful effects to aquatic life
100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.	
Persistence and degradability	No information available.

Bioaccumulation	No information available.
Mobility	No information available.

### 13. DISPOSAL CONSIDERATIONS

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Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

### 14. TRANSPORT INFORMATION

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DOT	Not regulated
IMDG	Not regulated
IATA	Not regulated

### 15. REGULATORY INFORMATION

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#### International Inventories

**All of the components in the product are on the following Inventory lists**

No information available

*X - Listed*

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

#### US 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 which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### **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

##### **CWA (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).

#### US State Regulations

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations****16. OTHER INFORMATION**

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Revision note

No information available

**Disclaimer**

The information provided in this Material 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.

**End of Safety Data Sheet**