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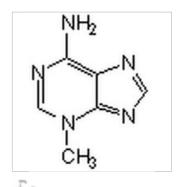
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## 189490 Sigma-Aldrich

# Autophagy Inhibitor, 3-MA - CAS 5142-23-4 - Calbiochem



Autophagy Inhibitor, 3-MA, CAS 5142-23-4, is a cell-permeable autophagic sequestration blocker that protects cerebellar granule cells from apoptosis following serum/potassium deprivation.

MSDS (material safety data sheet) or SDS, CoA and CoQ, dossiers, brochures and other available documents.

- SDS
- CoA
- References
- Data Sheet

Synonyms: 3-Methyladenine

### 189490

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#### **Recommended Products**



189497 Sigma-Aldrich Autophagy Inducer, STF-62247 - CAS 315702-99-9 -Calbiochem



**440202 Sigma-Aldrich** LY 294002 - CAS 154447-36-6 -Calbiochem



480065 Sigma-Aldrich Necrostatin-1 - CAS 4311-88-0 -Calbiochem



100496 Sigma-Aldrich Formaldehyde solution 4%, buffered, pH 6.9



324521 Sigma-Aldrich Eeyarestatin I - CAS 412960-54-4 -Calbiochem

### **Documentation**

## Autophagy Inhibitor, 3-MA - CAS 5142-23-4 - Calbiochem SDS

Title		
Safety Data Sheet (SDS)		

SDS Certificates of Analysis References **Data Sheet** 

## Autophagy Inhibitor, 3-MA - CAS 5142-23-4 - Calbiochem Certificates of Analysis

Title	Lot Number		
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## References

### Reference overview

Canu, N., et al. 2005. J. Neurochem. 92, 1228.

Hirosako, K., et al. 2004. Biochem. Biophys. Res. Commun. 316, 845.

Beugnet, A., et al. 2003. Biochem. J. 372, 555.

Eskelinen, E.L., et al. 2002. Traffic 3, 878.

Petiot, A., et al. 2000. J. Biol. Chem. 275, 992.

Seglen, P.O. and Gordon, P.B., 1982. Proc. Natl. Acad. Sci. USA 79, 1889.

### **Data Sheet**

Note that this data sheet is not lot-specific and is representative of the current specifications for this product. Please consult the vial label and the certificate of analysis for information on specific lots. Also note that shipping conditions may differ from storage conditions.

Revision	14-May-2012 JSW
Synonyms	3-Methyladenine
Description	A widely used cell-permeable autophagic sequestration blocker that effectly protects cerebellar granule cells from apoptosis following serum/potassium deprivation. Although a known class III PI3K inhibitor (IC $_{50}$ = 4.5 mM in cell-free enzymatic assays), 3-MA exhibits quite distinct pharmacological properties from those of two other PI3K inhibitors, LY 294002 (Cat. Nos. 440202 and 440204) and Wortmannin (Cat. No. 681675)
Form	White to faint yellow powder
Intert gas (Yes/No)	Packaged under inert gas

CAS number	5142-23-4
Chemical formula	C₀H₂N₅
Structure formula	
Purity	≥95% by HPLC
Solubility	DMSO (10 mg/ml) or H <sub>2</sub> O (5 mg/ml). In applications where high working concentrations are necessary (e.g. 10 mM), the use of a pre-made stock solution may result in the introduction of higher than desired solvent (e.g., DMSO) into the experimental systems. In such cases, it is recommended that the solid compound be weighed out at the time of use and reconstituted directly into the solutions used in the experimental system (buffers, media, etc.). Vortexing may be required for complete solubilization in water.
Storage	+2°C to +8°C Protect from light
Do Not Freeze	Ok to freeze
Special Instructions	Following reconstitution, aliquot and freeze (-20°C. Stock solutions are stable for up to 3 months at -20°C.
Toxicity	Standard Handling
References	Canu, N., et al. 2005. <i>J. Neurochem.</i> 92, 1228. Hirosako, K., et al. 2004. <i>Biochem. Biophys. Res. Commun.</i> 316, 845. Beugnet, A., et al. 2003. <i>Biochem. J.</i> 372, 555. Eskelinen, E.L., et al. 2002. <i>Traffic</i> 3, 878. Petiot, A., et al. 2000. <i>J. Biol. Chem.</i> 275, 992. Seglen, P.O. and Gordon, P.B., 1982. <i>Proc. Natl. Acad. Sci. USA</i> 79, 1889.

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3-MA - CAS 5142-23-4 - Calbiochem

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