

**Product Name:** PRIMA-1

**Catalog No.:** 1862

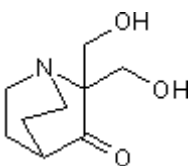
**Batch No.:** 4

**CAS Number:** 5608-24-2

**IUPAC Name:** 2,2-Bis(hydroxymethyl)-1-azabicyclo[2.2.2]octan-3-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>9</sub>H<sub>15</sub>NO<sub>3</sub>  
**Batch Molecular Weight:** 185.22  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
 phosphate buffered saline to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.2 (Chloroform:Methanol + NH<sub>4</sub>OH [9:1])  
**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.36	8.16	7.56
Found	58.34	8.17	7.46

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Selectively restores mutant p53 activity in tumor cells via activation of Bax and PUMA. Induces apoptosis and inhibits growth of human tumors with mutant p53.

**Physical and Chemical Properties:**

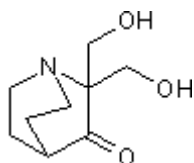
Batch Molecular Formula: C<sub>9</sub>H<sub>15</sub>NO<sub>3</sub>

Batch Molecular Weight: 185.22

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

water to 100 mM

phosphate buffered saline to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Bykov *et al* (2002)** Restoration of the tumour suppressor function to mutant p53 by a low-molecular-weight compound. *Nat.Med.* **8** 282. PMID: 11875500.

**Bykov *et al* (2002)** Mutant p53-dependent growth suppression distinguishes PRIMA-1 from known anticancer drugs: a statistical analysis of information in the National Cancer Institute database. *Carcinogenesis* **23** 2011. PMID: 12507923.

**Wang *et al* (2007)** PRIMA-1 induces apoptosis by inhibiting JNK signalling but promoting the activation of Bax. *Biochem.Biophys.Res.Commun.* **352** 203. PMID: 17113036.

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