

ubiquitin specific protease 3 fragment

Chemical Properties

CAS No.:	T23486
Formula:	C ₃₈ H ₆₈ N ₁₀ O ₁₅ S
Molecular Weight:	937.07
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	The ubiquitin specific protease 3 USP3 is a deubiquitinating enzyme for uH2A and uH2B.
In vitro	USP3 has been characterized as a functional DUB in vitro, and it is the human DUB most homologous to S. cerevisiae Ubp8, which regulates H2B deubiquitination ²⁻⁴ .
In vivo	USP3 dynamically associates with chromatin and deubiquitinates H2A/H2B in vivo. The ZnF-UBP domain of USP3 mediates uH2AUSP3 interaction. Functional ablation of USP3 by RNAi leads to delay of S phase progression and to the accumulation of DNA breaks, with ensuing activation of DNA damage checkpoint pathways. In response to ionizing radiation, (1) uH2A redistributes and colocalizes in γ-H2AX DNA repair foci, and (2) USP3 is required for full deubiquitination of ubiquitin-conjugates/uH2A and γ-H2AX dephosphorylation. USP3 is a novel regulator of H2A and H2B ubiquitination, highlight its role in preventing replication stress and suggest its involvement in the response to DNA double-strand breaks ¹ .

Solubility Information

Solubility	DMSO: ≥93.7mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.067 mL	5.336 mL	10.672 mL
5 mM	0.213 mL	1.067 mL	2.134 mL
10 mM	0.107 mL	0.534 mL	1.067 mL
50 mM	0.021 mL	0.107 mL	0.213 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481