

## ubiquitin specific protease 3 fragment

## Chemical Properties

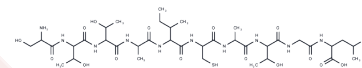
CAS No. :

Formula: C<sub>38</sub>H<sub>68</sub>N<sub>10</sub>O<sub>15</sub>S

Molecular Weight: 937.07

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	The ubiquitin specific protease 3 USP3 is a deubiquitinating enzyme for uH2A and uH2B.
Targets(IC50)	Others
In vitro	USP3 has been characterized as a functional DUB in vitro, and it is the human DUB most homologous to <i>S. cerevisiae</i> Ubp8, which regulates H2B deubiquitination <sup>2-4</sup> .
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 <sup>1</sup> .

## Solubility Information

Solubility	DMSO: ≥93.7 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.0672 mL	5.3358 mL	10.6716 mL
5 mM	0.2134 mL	1.0672 mL	2.1343 mL
10 mM	0.1067 mL	0.5336 mL	1.0672 mL
50 mM	0.0213 mL	0.1067 mL	0.2134 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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