

MATERIAL DATA SHEET

Recombinant Human His6 USP48

Cat. # E-614

USP48 is a deubiquitinating enzyme (DUB) of the C19 peptidase family. Human USP48 has a predicted molecular weight of 119 kDa and is 93% and 94% identical to mouse and rat orthologues, respectively. USP48 has been reported to trim K48-linked poly-Ubiquitin chains, an activity that is regulated by Casein Kinase 2 (CK2)-mediated phosphorylation of the DUB. In conjunction with the COP9 signalosome (CSN), nuclear localized USP48 controls the proteasome-dependent turnover of activated NF- κ B/RelA in the nucleus, thereby contributing to the control of immune responses. USP48 has also been indicated in the regulation of blood pressure and sodium balance via interactions with the dopamine D3 receptor (D3R) and the Na⁺-H⁺ exchanger. Finally, USP48 has been reported to stabilize Mdm2 in a manner that is not dependent on its deubiquitinating activity. This recombinant protein contains an N-terminal 6-His tag.

Product Information

Quantity:	50 μ g
MW:	120 kDa
Source:	<i>Spodoptera frugiperda</i> , Sf21 (baculovirus)-derived Accession # Q86UV5
Stock:	X mg/ml (X μ M) in 50 mM HEPES pH7.5, 100 mM NaCl, 10% (v/v) Glycerol, 1 mM TCEP
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use:	Recombinant Human USP48 is a Ubiquitin-specific deconjugating enzyme. Reaction conditions will need to be optimized for each specific application. We recommend an initial USP48 concentration of 200-500 nM.
Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 6 months from date of receipt, -70 °C as supplied.• 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Armando I., *et al.* (2014) FASEB J. **28**: 1422
2. Cetkovska K., *et al.* (2017) Sci.Rep. **7**: 43180
3. Schweitzer K. & Naumann M. (2015) Biochim Biophys Acta. **1853**: 453

For research use only. Not for use in humans.