

## MATERIAL DATA SHEET

### Recombinant Human His6 Josephin-1/JOSD1

#### Cat. # E-618

Josephin-1 is a member of the Machado-Joseph Disease protein (MJD) cysteine proteases, whose other members include Ataxin-3, Ataxin-3-like, and Josephin-2. 202 amino acids long with a predicted molecular weight of 23 kDa, Josephin-1 shares 97% identity with its mouse and rat orthologues. When ubiquitinated, Josephin-1 is capable of cleaving K48- and K63-linked polyubiquitin chains *in vitro*. Biologically, this enzyme may act to increase macropinocytosis and suppress clathrin- and caveolae-mediated endocytosis.

#### Product Information

<b>Quantity:</b>	25 µg
<b>MW:</b>	24 kDa
<b>Source:</b>	<i>Spodoptera frugiperda</i> , Sf21 (baculovirus)-derived human Josephin-1/JOSD1 protein Accession # Q15040 Contains a c-terminal 6His tag.
<b>Stock:</b>	X mg/ml (X µM) in 50 mM HEPES pH 7.0, 300 mM NaCl, 10% (v/v) Glycerol, 1 mM DTT
<b>Purity:</b>	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

#### Use & Storage

<b>Use:</b>	Recombinant Human Josephin-1 is a Ubiquitin-specific deconjugating enzyme. Reaction Conditions will need to be optimized for each specific application. We recommend an initial Josephin-1 concentration of 10-100 nM when using Ubiquitin-rhodamine (U-555) substrate and 100-500 nM when using Ubiquitin-AMC (U-550) substrate. As supplied, this enzyme will not efficiently cleave purified recombinant polyubiquitin chains.
<b>Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 24 months from date of receipt, -70 °C as supplied.</li> <li>• 3 months, -70 °C under sterile conditions after opening.</li> </ul>

## Literature

### References:

1. Seki T. *et al.* (2013) J. Biol. Chem. **288**: 17145
2. Weeks S.D. *et al.* (2011) J. Biol. Chem. **286**: 4555

***For research use only. Not for use in humans.***