

## Recombinant Human/Mouse USP46 Protein (SUMO Tag)

**Catalog Number:** PKSH030765

**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

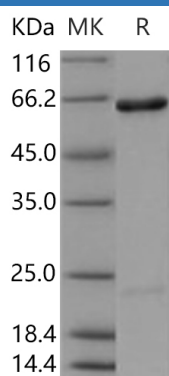
### Description

<b>Species</b>	Human
<b>Source</b>	Baculovirus-Insect Cells-derived Human USP46 protein Met 1-Glu366, with an N-terminal SUMO
<b>Calculated MW</b>	55.2 kDa
<b>Observed MW</b>	64 kDa
<b>Accession</b>	NP_808229.1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 90 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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USP46 belongs to the peptidase C19 family; USP12/USP46 subfamily. Deubiquitinating enzymes (DUBs) are a large group of proteases which are also commonly referred to as deubiquitinating peptidases; deubiquitinating isopeptidases; deubiquitinases; ubiquitin proteases; ubiquitin hydrolyases; ubiquitin isopeptidases; or Dubs. They regulate ubiquitin-dependent metabolic pathways by cleaving ubiquitin-protein bonds. They also may act as negative and positive regulators of the ubiquitin system. Besides ubiquitin recycling; they are also involved in processing of ubiquitin precursors; in proofreading of protein ubiquitination and in disassembly of inhibitory ubiquitin chains. USP46 is a deubiquitinating enzyme that plays a role in behavior; possibly by regulating GABA action. It may act by mediating the deubiquitination of GAD1/GAD67. USP46 has almost no deubiquitinating activity by itself and requires the interaction with WDR48 to have a high activity and it is not involved in deubiquitination of monoubiquitinated FANCD2.