

## Recombinant Human OTUB1/OTB1 Protein (His Tag)

**Catalog Number:** PKSH030767

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

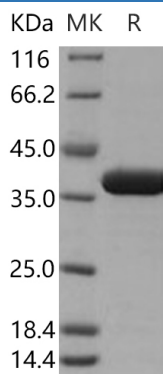
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human OTUB1/OTB1 protein Met 1-Lys 271, with an N-terminal His
<b>Calculated MW</b>	32.8 kDa
<b>Observed MW</b>	37 kDa
<b>Accession</b>	Q96FW1-1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 97 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<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 PBS, 20% glycerol, pH 7.4 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



> 97 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

Ubiquitin thioesterase OTUB1, also known as Deubiquitinating enzyme OTUB1, OTU domain-containing ubiquitin aldehyde-binding protein 1, Otubain-1, Ubiquitin-specific-processing protease OTUB1, OTUB1 and OTB1, is a cytoplasm protein which belongs to the peptidase C65 family. OTUB1 is a hydrolase that can remove conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation. OTUB1 is a regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen. OTUB1 acts via its interaction with RNF128 / GRAIL, a crucial inducer of CD4 T-cell anergy. Isoform 1 of OTUB1 destabilizes RNF128, leading to prevent anergy. In contrast, isoform 2 of OTUB1 stabilizes RNF128 and promotes anergy. OTUB1 regulates RNF128-mediated ubiquitination, but does not deubiquitinate polyubiquitinated RNF128. Deubiquitinates estrogen receptor alpha (ESR1). OTUB1 mediates deubiquitination of 'Lys-48'-linked polyubiquitin chains, but not 'Lys-63'-linked polyubiquitin chains. OTUB1 is also capable of removing NEDD8 from NEDD8 conjugates, but with a much lower preference compared to 'Lys-48'-linked ubiquitin.

## For Research Use Only

Toll-free: 1-888-852-8623  
Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086  
Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017