# Human Ubiquitin specific peptidase 30 / USP30 Protein (SUMO Tag)

Catalog Number: 14548-H21B



#### **General Information**

Gene Name Synonym:

USP30

**Protein Construction:** 

A DNA sequence encoding the human USP30 (AAX36198.1)(Thr48-Glu508) was fused with the SUMO tag at the N-terminus.

Source: Human

**Expression Host:** Baculovirus-Insect Cells

**QC** Testing

Purity: > 95 % as determined by SDS-PAGE

**Endotoxin:** 

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method

Predicted N terminal: Met

**Molecular Mass:** 

The secreted recombinant human USP30 consists of 580 amino acids and predicts a molecular mass of 66.3 KDa. The apparent molecular mass of the protein is approximately 87 KDa in SDS-PAGE under reducing conditions due to glycosylation.

## Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 8.0, 10% gly

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

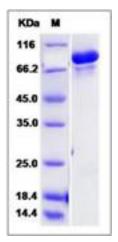
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

#### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



## **Protein Description**

Ubiquitin specific peptidase 3, also known as USP3, is a deubiquitinating enzyme that is embedded in the mitochondrial outer membrane. Depletion of USP3 expression by RNA interference induced elongated and interconnected mitochondria, depending on the activities of the mitochondrial fusion factors mitofusins, without changing the expression levels of the key regulators for mitochondrial dynamics. Mitochondria were rescued from this abnormal phenotype by ectopic expression of USP3 in a manner dependent on its enzymatic activity. USP3 participates in the maintenance of mitochondrial morphology, a finding that provides new insight into the cellular function of deubiquitination.

#### References

1.Wilkinson K. (1997) Regulation of ubiquitin-dependent processes by deubiquitinating enzymes. FASEB J. 11(14):1245-56.

2.Ventii KH, et al. (2009) Activity and Cellular Roles of Ubiquitin-Specific Deubiquitinating Enzymes. Annual Review of Biochemistry. 78:363-97. 3.Fang Y, et al. (2010) The potential role of ubiquitin c-terminal hydrolases in oncogenesis. Biochim Biophys Acta. 1806(1):1-6.