



Recombinant Protein Technical Manual

Recombinant Human USP14 Protein (His Tag)

RPES1842

Product Data:

Product SKU: RPES1842

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P54578

Protein Information:

Molecular Mass: 48.5 kDa

AP Molecular Mass: 52 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 100mM NaCl, 20% Glycerol, pH 8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Ubiquitin Carboxyl-Terminal Hydrolase 14; Deubiquitinating Enzyme 14; Ubiquitin Thioesterase 14; Ubiquitin-Specific-Processing Protease 14; USP14; TGT

Immunogen Information:

Sequence: Asp91-Gln494

Background:

Ubiquitin Carboxyl-Terminal Hydrolase 14 (USP14) belongs to the ubiquitin-specific processing (USP) family which is a deubiquitinating enzyme (DUB) with His and Cys domains. USP14 located in the cytoplasm is a proteasome-associated deubiquitinase which releases ubiquitin from the proteasome targeted ubiquitinated proteins. USP14 acts also as a physiological inhibitor of endoplasmic reticulum-associated degradation (ERAD) under the non-stressed condition by inhibiting the degradation of unfolded endoplasmic reticulum proteins via interaction with ERN1. In addition, USP14 is indispensable for synaptic development and function at neuromuscular junctions, required for the degradation of the chemokine receptor CXCR4 which is critical for CXCL12-induced cell chemotaxis.