

Recombinant Human USP14 Protein (His Tag)

Catalog No. PKSH033174

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

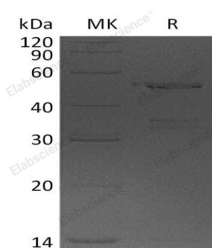
Description

Synonyms	Ubiquitin Carboxyl-Terminal Hydrolase 14;Deubiquitinating Enzyme 14;Ubiquitin Thioesterase 14;Ubiquitin-Specific-Processing Protease 14;USP14;TGT
Species	Human
Expression Host	E.coli
Sequence	Asp91-Gln494
Accession	P54578
Calculated Molecular Weight	48.5 kDa
Observed molecular weight	52 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein 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 Tris-HCl, 100mM NaCl, 20% Glycerol, pH 8.0.
Reconstitution	Not Applicable

Data



> 85 % as determined by reducing SDS-PAGE.

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

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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.