Active Recombinant Human USP14, His-tagged

Cat. No. USP14-159H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human USP14 (amino acid residues 1-494), fused with N-terminal 6His, was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	1-494 a.a.
Description	USP14 is a proteasome–associated DUB enzyme. Mammalian proteasomes are associated with three DUBs: USP14, UCHL5 (UCH37) and RPN11 (POH1). UCHL5 and USP14 reside on the 19S regulatory particle and remove ubiquitin from the substrate before substrate degradation whereas RPN11"s activity is delayed until the proteasome is committed to degrading the substrate (Lee et al., 2010).
Form	50mM HEPES pH7.5, 150mM NaCl2, 2mM DTT, 10% Glycerol
Bio-activity	Deubiquitylase Enzyme Assay: His-USP14 has limited activity against the fluorogenic substrate Ubiquitin-Rhodamine110-Glycine. The DUB activity of His-USP14 is known to be potentiated by proteasomes.
Molecular Mass	~58.5kDa
Purity	>60% by SDS-PAGE

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Storage	12 months at -70°C. Avoid multiple freeze/thaw cycles.
Concentration	0.5 mg/ml

GENE INFORMATION

Gene Name	USP14 ubiquitin specific peptidase 14 (tRNA-guanine transglycosylase) [Homo sapiens]
Official Symbol	USP14
Synonyms	USP14; ubiquitin specific peptidase 14 (tRNA-guanine transglycosylase); ubiquitin specific protease 14 (tRNA guanine transglycosylase); ubiquitin carboxyl-terminal hydrolase 14; TGT; ubiquitin thioesterase 14; deubiquitinating enzyme 14; ubiquitin thiolesterase 14; ubiquitin-specific processing protease 14; ubiquitin-specific-processing protease 14; tRNA-guanine transglycosylase, 60-kD subunit; ubiquitin specific protease 14 (tRNA-guanine transglycosylase);
Gene ID	9097
mRNA Refseq	NM_001037334
Protein Refseq	NP_001032411
MIM	607274
UniProt ID	P54578
Chromosome Location	18p11.32

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Function	cysteine-type endopeptidase activity; endopeptidase inhibitor activity; peptidase activity; proteasome binding; protein binding; tRNA guanylyltransferase activity; ubiquitin thiolesterase activity; ubiquitin-specific protease activity;

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