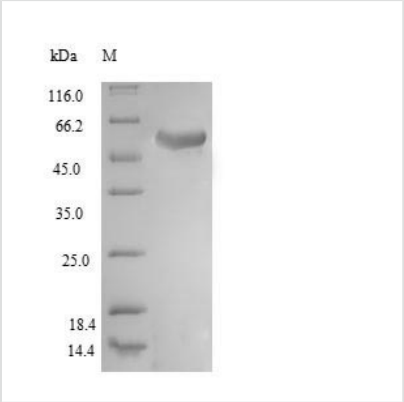
Recombinant Human Ubiquitin carboxyl-terminal hydrolase 14 (USP14)

Product Code	CSB-EP025704HU
Relevance	Proteasome-associated deubiquitinase which releases ubiquitin from the proteasome targeted ubiquitinated proteins. Ensures the regeneration of ubiquitin at the proteasome. Is a reversibly associated subunit of the proteasome and a large fraction of proteasome-free protein exists within the cell. Required for the degradation of the chokine receptor CXCR4 which is critical for CXCL12-induced cell chotaxis. Serves 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. Indispensable for synaptic development and function at neuromuscular junctions (NMJs).
Abbreviation	Recombinant Human USP14 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P54578
Alias	Deubiquitinating enzyme 14Ubiquitin thioesterase 14Ubiquitin-specific-processing protease 14
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MPLYSVTVKWGKEKFEGVELNTDEPPMVFKAQLFALTGVQPARQKVMVKGG TLKDDDWGNIKIKNGMTLLMMGSADALPEEPSAKTVFVEDMTEEQLASAMELP CGLTNLGNTCYMNATVQCIRSVPELKDALKRYAGALRASGEMASAQYITAALR DLFDSMDKTSSSIPPIILLQFLHMAFPQFAEKGEQGQYLQQDANECWIQMMRV LQQKLEAIEDDSVKETDSSSASAATPSKKKSLIDQFFGVEFETTMKCTESEEEE VTKGKENQLQLSCFINQEVKYLFTGLKLRLQEEITKQSPTLQRNALYIKSSKISR LPAYLTIQMVRFFYKEKESVNAKVLKDVKFPLMLDMYELCTPELQEKMVSFRS KFKDLEDKKVNQQPNTSDKKSSPQKEVKYEPFSFADDIGSNNCGYYDLQAVL THQGRSSSSGHYVSWVKRKQDEWIKFDDDKVSIVTPEDILRLSGGGDWHIAY VLLYGPRRVEIMEEESEQ
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Target Names	USP14
Expression Region	1-494aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at

	4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	60.1kDa
Protein Length	Full Length
Image	 (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Recombination of a plasmid encoding the Human USP14 protein (1-494aa) is the first step during the production the recombinant Human USP14 protein. The constructed plasmid is introduced into e.coli cells. e.coli cells that can survive in the presence of a specific antibiotic are selected to be cultured for the induction of protein expression. The protein is equipped with a N-terminal 6xHis tag. After expression, affinity purification is used to isolate and purify the recombinant Human USP14 protein from the cell lysate. Denaturing SDS-PAGE is then applied to resolve the resulting recombinant Human USP14 protein. Its purity exceeds 90%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
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