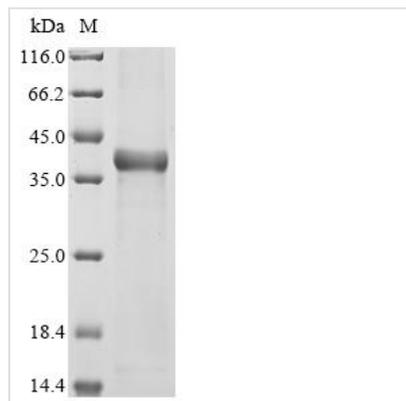




Recombinant Human Histone deacetylase 6 (HDAC6), Partial

Product Code	CSB-EP010242HU1
Abbreviation	Recombinant Human HDAC6 protein, partial
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.	Q9UBN7
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Human Histone deacetylase 6(HDAC6), Partial
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MMNHCNLWDSHHPEVPQRILRIMCRLEELGLAGRCLTLTPRPATEAELLTCHS AEYVGHLRATEKMKTRRELHRESSNFDSIYICPSTFACAQLATGAACRLVEAVLS GEVLNGAAVVRPPGHAEQDAACGFCFFNSVAVARHAQTISGHALRILIVDW DVHHGNGTQHMFEDDPSVLYVSLHRYDHGTFPPMGDEGASSQIGRAAGTGF TVNVAWNGPRMGDADYLAAWHRLVLPAYEFNPELVLSAGFDAARGDPLGG CQVSPEGYAHLTLLMGLASGRILILEGGYNLTSISESMAACTRSLLGDPPLL TLPRPPLSGALASITETIQVHRRYWRSLRVMKVE
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Target Names	HDAC6
Expression Region	489-840aa
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	42.5 kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The preparation of this recombinant Human HDAC6 protein was to use gene recombination DNA technology to obtain a recombinant vector connected with a HDAC6 fragment (489-840aa) that could be translated into the HDAC6 protein and then transferred it into E.coli cells to express the recombinant HDAC6 protein molecule. In order to get the target protein with high purity, N-terminal 6xHis tag was used in the production. The purity is 90% determined by SDS-PAGE.

HDAC6, a member of class IIb, localizes largely in the cytoplasm and is the only HDAC isoform with two tandem catalytic domains. In addition, HDAC6 has a hydrolase-like zinc finger domain, that binds and transports polyubiquitinated protein aggregates, and a domain that regulates through protein-protein interactions the cytoskeleton protein tau, Iip45, and EGFR. Histone deacetylases (HDACs) are often involved in transcriptional regulation, cell cycle progression, and developmental events. Targets of its deacetylase activity include tubulin, cortactin, HSP (heat shock protein), and Bruchpilot proteins. In various models of neurodegenerative diseases, pharmacological inhibition of HDAC6 restores alpha-tubulin acetylation and mitochondrial transport. In addition, HDAC6 inhibitors (HDAC6i) facilitate the degradation of protein aggregates and/or protection from neuronal oxidative stress. Therefore, it plays a central role in the epigenetic regulation of CNS function, with emphasis on development, neurodegenerative diseases, and various mental disorders.

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. 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.