

Product datasheet for PH302190

USP13 (NM_003940) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	USP13 MS Standard C13 and N15-labeled recombinant protein (NP_003931)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC202190
Predicted MW:	97.3 kDa
Protein Sequence:	>RC202190 protein sequence Red=Cloning site Green=Tags(s)

MQRRGALFGMPGGSGGRKMAAGDIGELLVPHMPTIRVPRSGDRVYKNECAFSDSPNSEGGLYVCMNTFL
AFGREHVERHFRKTGQSVYMLKRVREKVRGASGGALPKRRNSKIFLDLDTDDDLNSDDYEYEDAKLV
IFPDHYEIALPNIEELPALVTIACDAVLSSKSPYRKQDPDTWENELPVSKYANNLTQLDNGVRIPPSGWK
CARCDLRENWLNLTDGSVLCGKWFDFSSGGNGHALEHYRDMGYPLAVKLGITITPDGADVYSFQEEEPVL
DPHLAKHLAHFGIDMLMHGTENGLQDNDIKLRVSEWEVIQESGTKLKPMYGPYTGKLNLSGNSCYLSSV
MQAIFSIPEFQRAYVGNLPRIFDYSPLDPTQDFNTQMTKLGHLLSGQYSKPPVKSELIEQVMKEEHKPKQ
QNGISPRMFKAFVSKSHPEFSSNRQQAQEFLLHLVNLVERNRIIGSENPSDVFRFLVEERIQQCQTRKVR
YTERVDYLMQLPVAMEAATNKDELIAVELTRREAANRRRPLPELVRAKIPFSACLQAFSEPEENVDDFWSS
ALQAKSAGVKTSRFASFPEYLVVQIKKFTFGLDWVPKFDVSDMPDLLDINHLRARGLQPGEEELPDIS
PPIVIPDDSKDRLMNQLIDPSDIDESSVMQLAEMGFPLEACRKAVYFTGNMGAEVAFNWIIVHMEEPDFA
EPLTMPGYGGAASAGASVFGASGLDNQPPEEIVAIITSMGFQRNQAIQALRATNNLRLALDWIFSHPEF
EEDSDFVIEMENNANANIISEAKPEGPRVKDGSPTYELFAFISHMGTSTMSGHYICHIKKEGRWVIYNDH
KVCASERPPKDLGYMYFYRRIPS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.



[View online »](#)

RefSeq: [NP_003931](#)

RefSeq Size: 7933

RefSeq ORF: 2589

Synonyms: IsoT-3; ISOT3

Locus ID: 8975

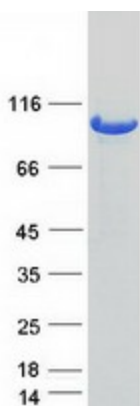
UniProt ID: [Q92995](#), [A0A0A6YZ17](#)

Cytogenetics: 3q26.33

Summary: Deubiquitinase that mediates deubiquitination of target proteins such as BECN1, MITF, SKP2 and USP10 and is involved in various processes such as autophagy and endoplasmic reticulum-associated degradation (ERAD). Component of a regulatory loop that controls autophagy and p53/TP53 levels: mediates deubiquitination of BECN1, a key regulator of autophagy, leading to stabilize the PIK3C3/VPS34-containing complexes. Also deubiquitinates USP10, an essential regulator of p53/TP53 stability. In turn, PIK3C3/VPS34-containing complexes regulate USP13 stability, suggesting the existence of a regulatory system by which PIK3C3/VPS34-containing complexes regulate p53/TP53 protein levels via USP10 and USP13. Recruited by nuclear UFD1 and mediates deubiquitination of SKP2, thereby regulating endoplasmic reticulum-associated degradation (ERAD). Also regulates ERAD through the deubiquitination of UBL4A a component of the BAG6/BAT3 complex. Mediates stabilization of SIAH2 independently of deubiquitinase activity: binds ubiquitinated SIAH2 and acts by impairing SIAH2 autoubiquitination. Has a weak deubiquitinase activity in vitro and preferentially cleaves 'Lys-63'-linked polyubiquitin chains. In contrast to USP5, it is not able to mediate unanchored polyubiquitin disassembly. Able to cleave ISG15 in vitro; however, additional experiments are required to confirm such data.[UniProtKB/Swiss-Prot Function]

Protein Families: Druggable Genome, Protease

Product images:



Coomassie blue staining of purified USP13 protein (Cat# [TP302190]). The protein was produced from HEK293T cells transfected with USP13 cDNA clone (Cat# [RC202190]) using MegaTran 2.0 (Cat# [TT210002]).