

## Product datasheet for TP302190M

### USP13 (NM\_003940) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human ubiquitin specific peptidase 13 (isopeptidase T-3) (USP13), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC202190 protein sequence Red=Cloning site Green=Tags(s)

MQRRGALFGMPGGSGGRKMAAGDIGELLVPHMPTIRVPRSGDRVYKNECAFSYDSPNSEGGLYVCMNTFL  
AFGREHVERHFRKTGQSVYMHKLRHVREKVRGASGGALPKRRNSKIFLDLTDLNSDDYEYEDAKLV  
IFPDHYEIALPNIEELPALVTIACDAVLSSKSPYRKQDPDTWENELPVSKYANNLTQLDNGVRIPPSGWK  
CARCDLRENLWLNLTDGSVLCKGWFFDSSGGNGHALEHYRDMGYPLAVKLGTTIPDGADVYSFQEEEPVL  
DPHLAKHLAHFGIDMLHMHGTENGLQDNDIKLRVSEWEVIQESGTKLKPMYGPYGTGLKNLGNSCYLSSV  
MQAIFSIPEFQRAYVGNLPRIFDYSPLDPTQDFNTQMTKLGHGLLSGQYSKPPVKSELIEQVMKEEHKPKQ  
QNGISPRMFKAFVSKSHPEFSSNRQQDAQEFFLHLVNLVERNRIIGSENPSDVFRFLVEERIQCCQTRKVR  
YTERVDYLMQLPVAMEAATNKDELIAYELTRREAEANRRRPLPELVRAKIPFSACLQAFSEPENVDDFWSS  
ALQAKSAGVKTSRFASFPEYLVQIKKFTFGLDWPKKFDVSDMPDLLDINHRLRARGLQPGEEELPDIS  
PPIVIPDDSKDRLMNQLIDPSDIDESSVMQLAEMGFPLEACRKAVYFTGNMGAEVAFNWIIVHMEEPDFA  
EPLTMPGYGGAASAGASVFGASGLDNQPPEEIVAITSMGFQRNQAIALRATNNLALDWFIFSHPEF  
EEDSDFVIEMENNANANIIEAKPEGPRVKDGSPTYELFAFISHMGTSTMSGHYICHIKKEGRWVIYNDH  
KVCASERPPKDLGYMYFYRRIPS

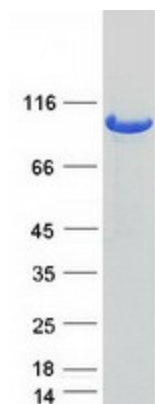
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	97.1 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_003931</a>
<b>Locus ID:</b>	8975
<b>UniProt ID:</b>	<a href="#">Q92995</a> , <a href="#">A0A0A6YZ17</a>
<b>RefSeq Size:</b>	7933
<b>Cytogenetics:</b>	3q26.33
<b>RefSeq ORF:</b>	2589
<b>Synonyms:</b>	IsoT-3; ISOT3
<b>Summary:</b>	<p>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.</p> <p>[UniProtKB/Swiss-Prot Function]</p>
<b>Protein Families:</b>	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]).