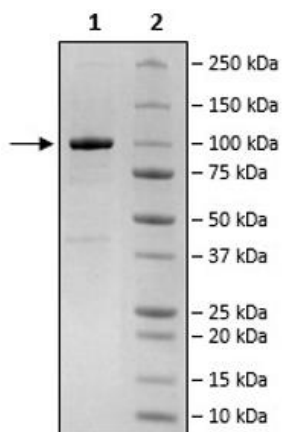


Product Information

Description:	Recombinant human USP13 (ubiquitin carboxyl-terminal hydrolase 13), encompassing amino acids 2-863(end). This construct contains an N-terminal His-tag (6xHis) and a C-terminal FLAG-tag. This protein was affinity purified.
Background:	USP13 (ubiquitin carboxyl-terminal hydrolase 13), also known as isopeptidase T 3 (ISOT-3) is a DUB (deubiquitination) enzyme. It participates in multiple crucial cellular processes, such as autophagy, DNA damage response, ERAD (endoplasmic reticulum-associated degradation) by deubiquitinating proteins involved in those functions. It also plays roles in diseases such as cancer and neurodegeneration. It can play both a suppressor and activator role in tumorigenesis. For instance, low levels of USP13 correlate with low levels of PTEN (phosphatase and tensin homolog), as UPS13 stabilizes the protein. A deeper understanding of all its cellular roles and how to best target its function in a specific context may prove beneficial in cancer therapy.
Species:	Human
Construct:	USP13 (His-2-863(end)-FLAG)
Concentration:	0.38 mg/ml
Expression System:	HEK293
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	45 mM Tris-HCl, pH 8.0, 300 mM NaCl, 2.48 mM KCl, 0.045% Tween-20, 10% glycerol, 100 µg/ml FLAG peptide
MW:	100 kDa
Genbank Accession:	NM_003940.3
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Specific Activity:	5 pmol/min/µg
Assay Conditions:	USP13 was incubated in 50 mM Tris-HCl, 0.5 mM EDTA, 0.05% Tween 20, 1 mM DTT with 500 nM Ubiquitin-AMC. The reaction was incubated at room temperature for 30 minutes. Fluorescence intensity was measured at $\lambda_{exc}/\lambda_{em}$ of 360nm/460nm using a Tecan M1000 plate reader.
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



USP13 Activity

