

## Recombinant USP7 protein

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**Catalog No:** 31525, 31925

**Lot No:** 08215001

**Expressed In:** Baculovirus

**Quantity:** 20, 1000 µg

**Concentration:** 0.7 µg/µl

**Source:** Human

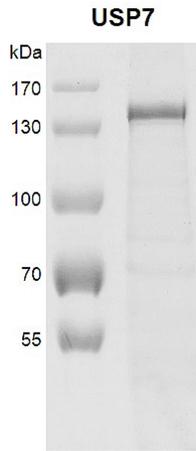
**Buffer Contents:** Recombinant full length USP7 protein is supplied at a concentration of 0.7 µg/µl in 25 mM Tris-HCl pH 8.0, 300 mM NaCl, 5% glycerol, 0.04% Triton X-100.

**Background:** USP7 (Ubiquitin Specific Peptidase 7 (Herpes Virus-Associated)) belongs to the peptidase C19 family, which includes ubiquitinyl hydrolases. USP7 de-ubiquitinates target proteins such as FOXO4, p53/TP53, MDM2, UHRF1, PTEN and DAXX. Together with DAXX, USP7 prevents MDM2 self-ubiquitination and enhances the E3 ligase activity of MDM2 towards p53/TP53, thereby promoting p53/TP53 ubiquitination and proteasomal degradation. USP7 de-ubiquitinates p53/TP53, preventing degradation of p53/TP53, and enhances p53/TP53-dependent transcription regulation, cell growth repression and apoptosis. USP7 also de-ubiquitinates FOXO4 and inhibits FOXO4-induced transcriptional activity. Together with DAXX, USP7 is involved in the de-ubiquitination and translocation of PTEN from the nucleus to the cytoplasm, both processes that are counteracted by PML. USP7 de-ubiquitinates UHRF1, which prevents its degradation and promoting DNA methylation by DNMT1.

**Protein Details:** Recombinant human USP7 was expressed in a baculovirus expression system as the full length protein (accession number NP\_003461.2) with an N-terminal 6×HIS tag. The molecular weight of the protein is 131.3 kDa. The purity of USP7 protein is >80% by SDS-PAGE.

**Application Notes:** This protein is useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

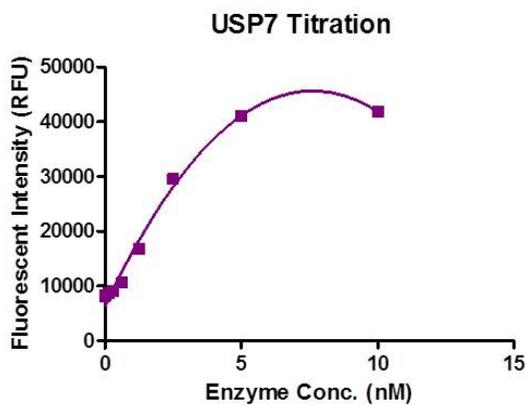


### Recombinant USP7 protein gel

8% SDS-PAGE gel stained with Coomassie Blue

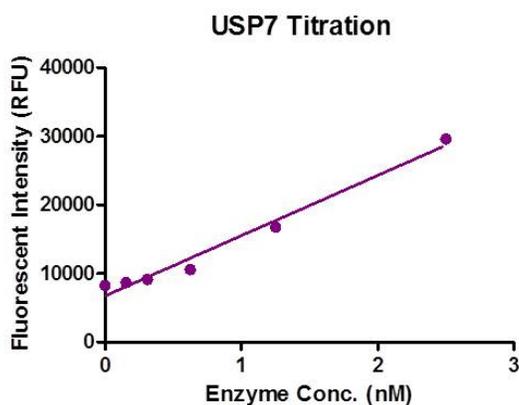
MW: 131.3 kDa

Purity: >80%



### DUB-Detector assay (Cat. No. 40110) for USP7 protein activity

100 nM Fluorescent Substrate was incubated with different concentration of USP7 protein for 1 hour at room temperature. The fluorescent intensity of the reaction was measured with an excitation wavelength of 485 nm and an emission wavelength of 535nm.



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