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# Recombinant Human USP7/HAUSP Protein (aa 208-560, His &GST Tag)

Catalog Number: PKSH031030

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Description**

**Species** Human

Source Baculovirus-Insect Cells-derived Human USP7/HAUSP protein Lys 208-Glu 560, with

an N-terminal His & GST

Mol Mass 68.8 kDa Accession NP 003461.2

**Bio-activity** Not validated for activity

## **Properties**

**Purity** > 98 % as determined by reducing SDS-PAGE.

Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method.

Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

This product is provided as lyophilized powder which is shipped with ice packs. Shipping Lyophilized from sterile 50mM Tris, 100mM NaCl, 0.5mM PMSF, 0.5mM EDTA, pH Formulation

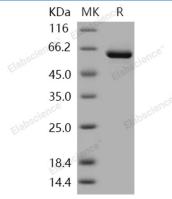
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

#### Data



> 98 % as determined by reducing SDS-PAGE.

#### Background

#### For Research Use Only

Fax: 1-832-243-6017

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Ubiquitin carboxyl-terminal hydrolase 7, also known as Ubiquitin thioesterase 7, Herpesvirus-associated ubiquitin-specific protease, Ubiquitin-specific-processing protease 7, USP7 and HAUSP, is a widely expressed protein which belongs to thepeptidase C19 family. USP7 is a member of the family of deubiquitinating enzymes. It is involved in the regulation of stress response pathways, epigenetic silencing and the progress of infections by DNA viruses. USP7 is a protein with a cysteine peptidase core, N- and C-terminal domains required for protein-protein interactions. USP7 contributes to epigenetic silencing of homeotic genes by Polycomb (Pc). USP7 cleaves ubiquitin fusion protein substrates. It deubiquitinates TP53/p53 and MDM2 and strongly stabilizes TP53 even in the presence of excess MDM2. USP7 also induces TP53-dependent cell growth repression and apoptosis. USP7 has key roles in the p53 pathway whereby it stabilizes both p53 and MDM2. Herpes simplex virus type 1 (HSV-1) regulatory protein ICP0 stimulates lytic infection and the reactivation of quiescent viral genomes. ICP0 interacts very strongly with USP7. USP7-mediated stabilization of ICP0 is dominant over ICP0-induced degradation of USP7 during productive HSV-1 infection. The biological significance of the ICP0-USP7 interaction may be most pronounced in natural infection situations, in which limited amounts of ICP0 are expressed.

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