

Recombinant Human USP7 / HAUSP Protein (aa 208-560)

Cat.NO.: TP04975

3th Edition

Synonyms:HAUSP;TEF1

Description: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 the peptidase 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.

Form:PBS

Molecular Weight:41 kDa

Sequences:Lys 208-Glu 560

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.