Recombinant Protein Technical Manual

Recombinant Human SETD8/PR-Set7 Protein

RPES0931

Product Data:

Product SKU: RPES0931

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: NP_065115.3

Protein Information:

Molecular Mass: 18.2 kDa

AP Molecular Mass: 18 kDa

Tag:

Bio-activity:

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

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 100mM NaCl, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: KMT5A;PR-Set7;SET07;SET8

Immunogen Information:

Sequence: Lys 195-His 352

Background:

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) 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 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.