



Recombinant Protein Technical Manual

Recombinant Human HtrA2/Omi Protein (His Tag)(Active)
RPES3586

Product Data:

Product SKU: RPES3586

Size: 100µg

Species: Human

Expression host: E. coli

Uniprot: O43464

Protein Information:

Molecular Mass:

AP Molecular Mass: 36.5 kDa

Tag: C-His

Bio-activity: Protease activity demonstrated by HtrA2 cleavage of bovine β -casein (Sigma, Catalog # C-6905). Incubation of β -casein at 0.2 mg/mL with Recombinant Human HTRA-2 at 0.02 mg/mL (ratio of 10:1) for 60 minutes at 45°C in 50 mM Tris, pH 8.0, which results in >95% cleavage of β -casein, as revealed by SDS-PAGE.

Purity: > 87 % 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°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

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

Formulation: Lyophilized from sterile 50mM Tris, 0.3M NaCl, 1mM DTT, 20% Glycerol, pH 7.8

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

Application:

Synonyms: Serine protease HTRA2; mitochondrial;High temperature requirement protein A2;HtrA2;Omi stress-regulated endoprotease;Serine protease 25;Serine proteinase OMI;HTRA2;OMI; PRSS25

Immunogen Information:

Sequence: Ala 134-Glu 458

Background:

Serine protease HTRA2, also known as high temperature requirement protein A2, Omi stress-regulated endoprotease, Serine protease 25, Serine proteinase OMI and HTRA2, is a single-pass membrane protein which belongs to the peptidase S1B family. HTRA2 contains one PDZ (DHR) domain. HTRA2 is a serine protease that shows proteolytic activity against a non-specific substrate beta-casein. It promotes or induces cell death either by direct binding to and inhibition of BIRC proteins (also called inhibitor of apoptosis proteins, IAPs), leading to an increase in caspase activity, or by a BIRC inhibition-independent, caspase-independent and serine protease activity-dependent mechanism. HTRA2 cleaves THAP5 and promotes its degradation during apoptosis. Isoform 2 of HTRA2 seems to be proteolytically inactive. Defects in HTRA2 are the cause of Parkinson disease type 13 (PARK13) which is a complex neurodegenerative disorder characterized by bradykinesia, resting tremor, muscular rigidity and postural instability, as well as by a clinically significant response to treatment with levodopa.