

# Recombinant Protein Technical Manual Recombinant Human IDE/Insulysin Protein (His Tag) RPES1543

### Product Data:

**Product SKU:** RPES1543 **Size:** 10μg

Species: Human Cells

**Uniprot:** P14735

### **Protein Information:**

Molecular Mass: 114.3 kDa

AP Molecular Mass: 120 kDa

Tag: C-6His

**Bio-activity:** 

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue

ice/gel packs. Upon receipt, store it immediately at<-20°C.

**Formulation:** Supplied as a 0.2 μm filtered solution of 20mM TrisHCl,150mM

NaCl, 0.05% Brij 35, 10% Glycerol, pH7.5.

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

**Application:** 

**Synonyms:** Insulin-Degrading Enzyme; Abeta-Degrading Protease; Insulin Protease; Insulinase;

Insulysin; IDE

# Immunogen Information:

Sequence: Met42-Leu1019

## **Background**:

Insulin-Degrading Enzyme (IDE) is a secreted enzyme that belongs to the peptidase M16 family. IDE is a large zinc-binding protease and cleaves multiple short polypeptides that vary considerably in sequence. IDE plays a role in the cellular breakdown of insulin, IAPP, glucagon, bradykinin, kallidin, and other peptides, and thereby plays a role in intercellular peptide signaling. IDE degrades amyloid formed by APP and IAPP. IDE may participate in the degradation and clearance of naturally secreted amyloid  $\beta$ -protein by neurons and microglia. IDE, which migrates at 110 kDa during gel electrophoresis under denaturing conditions, has since been shown to have additional substrates, including the signaling peptides glucagon, TGF  $\alpha$  and  $\beta$ -endorphin.