Recombinant Human IDE protein (His Tag)

Catalog Number: PDEH100811

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

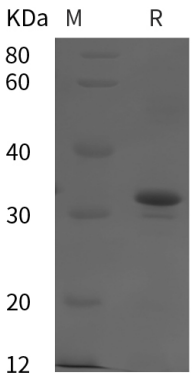
Description

Species	Human
Source	E.coli-derived Human IDE protein Ala753-Pro973, with an N-terminal His
Calculated MW	24.2 kDa
Observed MW	32 kDa
Accession	P14735
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. 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 a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

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 β-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 α and β-endorphin.