

Recombinant IDE protein

Catalog No: 81303, 81603

Expressed In: *E. coli*

Quantity: 50, 1000 µg

Concentration: 2 µg/µl

Source: Human

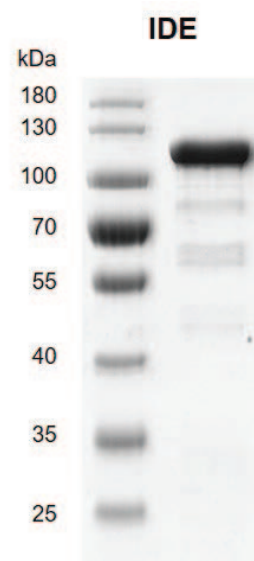
Buffer Contents: Recombinant IDE protein is supplied in 25 mM Tris-HCl pH 8.0, 300 mM NaCl, 10% glycerol and 0.5 mM TCEP

Background: IDE (Insulin Degrading Enzyme) is a zinc metallopeptidase that degrades intracellular insulin, and thereby terminates insulin's activity, as well as participating in intercellular peptide signaling by degrading diverse peptides such as glucagon, amylin, bradykinin, and kallidin. The preferential affinity of this enzyme for insulin results in insulin-mediated inhibition of the degradation of other peptides such as beta-amyloid. Deficiencies in this protein's function are associated with Alzheimer's disease and type 2 diabetes mellitus but mutations in this gene have not been shown to be causative for these diseases. This protein localizes primarily to the cytoplasm but in some cell types localizes to the extracellular space, cell membrane, peroxisome, and mitochondrion. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described but have not been experimentally verified.

Protein Details: Full length human IDE protein was expressed in *E. coli* cells (accession number NP_004960.2) with a C-terminal 6×His tag. The molecular weight of the protein is 114.3 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of arrival.



Recombinant IDE protein gel
10% SDS-PAGE with Coomassie blue staining

MW: 114.3 kDa

Purity: >90%