

## Summary

Name	Insulysin/IDE
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/µg as determined by LAL test.
Construction	Recombinant Human Insulin-Degrading Enzyme is produced by our Mammalian expression system and the target gene encoding Met42-Leu1019 is expressed with a 6His tag at the C-terminus.
Accession #	P14735
Host	Human Cells
Species	Human
Predicted Molecular Mass	114.25 KDa
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 0.05% Brij35, 10% Glycerol, pH 7.5.
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq$ -70°C, stable for 6 months after receipt. Store at $\leq$ -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	

## **SDS-PAGE** image

kDa	MK	R
170 130 95 72 55		
43 34		
26	-	

## Background

Alternative Names	Insulin-Degrading Enzyme; Abeta-Degrading Protease; Insulin Protease; Insulinase; Insulysin; IDE
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.

## Note

For Research Use Only, Not for Diagnostic Use.