

## Recombinant Human IDE Catalog No: CA05

Description 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.

Source **Human Cells** 

**Alternative name** Insulin-Degrading Enzyme; Abeta-Degrading Protease; Insulin Protease; Insulinase; Insulysin; IDE

P14735 Accession No.

**Formulation** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl,150mM NaCl,0.05%Brij35,10%Glycerol, pH7.5.

Greater than 95% as determined by reducing SDS-PAGE. **Quality Control** Purity:

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

**Shipping** The product is shipped on dry ice/polar packs.

Upon receipt, store it immediately at the temperature listed below.

**Storage** Store at < -20°C, stable for 6 months after receipt.

Please minimize freeze-thaw cycles.

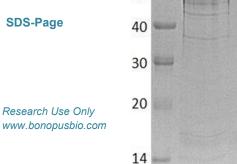
MNNPAIKRIGNHITKSPEDKREYRGLELANGIKVLLISDPTTDKSSAALDVHIGSLSDPPNIAGLSHFCEHML FLGTKKYPKENEYSQFLSEHAGSSNAFTSGEHTNYYFDVSHEHLEGALDRFAQFFLCPLFDESCKDREV NAVDSEHEKNVMNDAWRLFQLEKATGNPKHPFSKFGTGNKYTLETRPNQEGIDVRQELLKFHSAYYSSN LMAVCVLGRESLDDLTNLVVKLFSEVENKNVPLPEFPEHPFQEEHLKQLYKIVPIKDIRNLYVTFPIPDLQK YYKSNPGHYLGHLIGHEGPGSLLSELKSKGWVNTLVGGQKEGARGFMFFIINVDLTEEGLLHVEDIILHMF QYIQKLRAEGPQEWVFQECKDLNAVAFRFKDKERPRGYTSKIAGILHYYPLEEVLTAEYLLEEFRPDLIEM VLDKLRPENVRVAIVSKSFEGKTDRTEEWYGTQYKQEAIPDEVIKKWQNADLNGKFKLPTKNEFIPTNFEI LPLEKEATPYPALIKDTAMSKLWFKQDDKFFLPKACLNFEFFSPFAYVDPLHCNMAYLYLELLKDSLNEYA YAAELAGLSYDLQNTIYGMYLSVKGYNDKQPILLKKIIEKMATFEIDEKRFEIIKEAYMRSLNNFRAEQPHQ HAMYYLRLLMTEVAWTKDELKEALDDVTLPRLKAFIPQLLSRLHIEALLHGNITKQAALGIMQMVEDTLIEH AHTKPLLPSQLVRYREVQLPDRGWFVYQQRNEVHNNCGIEIYYQTDMQSTSENMFLELFCQIISEPCFNT LRTKEQLGYIVFSGPRRANGIQGLRFIIQSEKPPHYLESRVEAFLITMEKSIEDMTEEAFQKHIQALAIRRLD KPKKLSAECAKYWGEIISQQYNFDRDNTEVAYLKTLTKEDIIKFYKEMLAVDAPRRHKVSVHVLAREMDSC PVVGEFPCQNDINLSQAPALPQPEVIQN MTEFKRGLPLFPLVKPHINFMAAKLLDHHHHHH

**Background** 

**Amino Acid** 

Sequence

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  $\alpha$  and  $\beta$ -endorphin.



KDa MK

120 90 60 NR

