Recombinant Rat Insulin Degrading Enzyme, His-tagged

Cat. No. Ide-761R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant rat insulin degrading enzyme was fused to a His•Tag sequence and expressed in*S. frugiperda*insect cells.MW = 110 kDa.
Species	Rat
Source	S.frugiperda
Description	Insulin Degrading Enzyme (IDE) is a large zinc-binding protease of the M16A metalloprotease subfamily known to cleave multiple short polypeptides that vary considerably in sequence. IDE was first identified by its ability to degrade the B chain of the hormone insulin. This activity was observed over fifty years ago, though the enzyme specifically responsible for B chain cleavage was identified more recently. This discovery revealed considerable amino acid sequence homology between IDE and the previously characterized bacterial protease pitrilysin, suggesting a common proteolytic mechanism.
Purity	≥90% by SDS-PAGE.
Form	Liquid. In 100 mM potassium phosphate buffer, 20% glycerol, pH 7.3.
Specific Activity	≥3 U/mg protein.
Unit Definition	One unit is defined as the amount of the enzyme that will catalyze the hydrolysis of 1 μmol iodinated insulin per h at 37°C, pH 7.3.

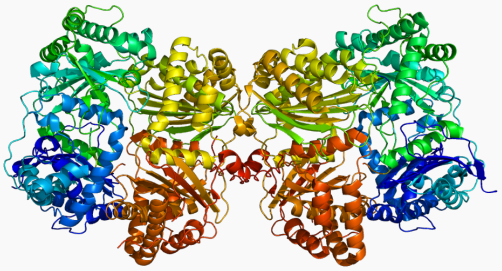
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Specificity	≥4 units/mg protein.
Storage	≤ -70℃. Avoid freeze/thaw.

GENE INFORMATION

Gene Name	Ide insulin degrading enzyme [Rattus norvegicus]
Synonyms	Ide; insulin degrading enzyme; INSDEGM; insulin-degrading enzyme; insulysin; insulinase; insulin protease; EC 3.4.24.56
Gene ID	25700
mRNA Refseq	NM_013159
Protein Refseq	NP_037291
UniProt ID	P35559
Chromosome Location	1q53
Pathway	Alzheimer"s disease
Function	ATP binding; ATPase activity; beta-amyloid binding; beta-endorphin binding; insulin binding; metal ion binding; metalloendopeptidase activity; peptidase activity; nucleotide binding; peptide hormone binding; protein binding; protein homodimerization activity; zinc ion binding

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

PDB rendering based on 2g47.	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA