



Recombinant Protein Technical Manual

Recombinant Human CMA1/Chymase 1 Protein (His Tag)

RPES1458

Product Data:

Product SKU: RPES1458

Size: 10µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P23946

Protein Information:

Molecular Mass: 26.6 kDa

AP Molecular Mass: 33 kDa

Tag: C-His

Bio-activity:

Purity: > 92 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt; store it immediately at < -20°C.

Formulation: Supplied as sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: chymase;CYH;MCT1

Immunogen Information:

Sequence: Met 1-Asn 247

Background:

Chymotrypsin C (abbreviated for CTRC), also known as caldecrin or elastase4, is a digestive enzyme of the peptidase S1 family. This enzyme is synthesized as an inactivate chymotrypsinogen. On cleavage by trypsin into two parts that activate each other by removing two small peptides in a trans-proteolysis, chymotrypsin C produced. N-linked glycosylation of human CTRC is required for efficient folding and secretion, however, the N-linked glycan is unimportant for enzyme activity or inhibitor binding. It has been proposed that CTRC is a key regulator of digestive zymogen activation and a physiological co-activator of digestive carboxypeptidases proCPA1 and proCPA2. Mutations that abolish activity or secretion of CTRC increase the risk for chronic pancreatitis. It's speculated that CTRC might regulate pancreatic cancer cell migration in relation to cytokeratin 18 expression. The pancreatic cancer cell migration ability was downregulated in pancreatic cancer Aspc cells that overexpressed CTRC, whereas the cell migration ability was upregulated in Aspc cells in which CTRC was suppressed.