



Recombinant Protein Technical Manual

Recombinant Human Cathepsin S/CTSS Protein (His Tag)(Active)
RPES3899

Product Data:

Product SKU: RPES3899

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P25774

Protein Information:

Molecular Mass: 36.9&25&11.2 kDa

AP Molecular Mass: 37-40&26-28&146 kDa

Tag: C-His

Bio-activity: Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH₂ The specific activity is 9063.642 pmol/min/µg.

Purity: > 90% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, 10% Glycerol, pH 5.5.

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

Application:

Synonyms: Cathepsin S;CTSS;CTSS;MGC3886

Immunogen Information:

Sequence: Gln17-Ile331(pro)&Ser109-Ile331&Gln17-Ser109(Propeptide)

Background:

Cathepsin S is a lysosomal enzyme that belongs to the papain family of cysteine proteases. This protein is expressed by antigen presenting cells including macrophages, B-lymphocytes, dendritic cells and microglia. Moreover, cathepsin S is expressed in some epithelial cells. Compared with the abundant cathepsins B, LandH, cathepsin S shows a restricted tissue distribution, with highest levels in spleen, heart, and lung. In addition, evidences indicated that cathepsin S generates A beta from amyloidogenic fragments of beta APP in the endosomal/lysosomal compartment, and is implicated in the pathogenesis of Alzheimer's disease(AD) and Down Syndrome (DS).