

Active Recombinant Human CTSS Protein, Fc-Tagged

Cat. No. CTSS-01H Lot. No. (See product label)

SPECIFICATION

| | |
|-------------------------|--|
| Product Overview | Mouse myeloma cell line, NS0-derived human Cathepsin S protein Gln17-Ile331 (pro) & Ser109-Ile331 (mature), both with a C-terminal 10-His tag |
| Species | Human |
| Source | NS0 |
| ProteinLength | 17-331;109-331 a.a. |
| Description | The preproprotein encoded by this gene, a member of the peptidase C1 family, is a lysosomal cysteine proteinase that participates in the degradation of antigenic proteins to peptides for presentation on MHC class II molecules. The mature protein cleaves the invariant chain of MHC class II molecules in endolysosomal compartments and enables the formation of antigen-MHC class II complexes and the proper display of extracellular antigenic peptides by MHC-II. The mature protein also functions as an elastase over a broad pH range. When secreted from cells, this protein can remodel components of the extracellular matrix such as elastin, collagen, and fibronectin. This gene is implicated in the pathology of many inflammatory and autoimmune diseases and, given its elastase activity, plays a significant role in some pulmonary diseases. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. |
| Bio-activity | Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH ₂ . The specific activity is >300 pmol/min/g, as measured under |

 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

the described conditions.

| | |
|-------------------------------------|---|
| Molecular Mass | 39 kDa (Pro) and 28 kDa (mature) |
| N-terminal Sequence Analysis | Gln17 predicted & Ser109 |
| Endotoxin | <1.0 EU per 1 µg of the protein by the LAL method. |
| Purity | >95%, by SDS-PAGE under reducing conditions and visualized by silver stain |
| Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -20 to -70 °C as supplied. 3 months, -20 to -70 °C under sterile conditions after opening. |
| Storage Buffer | Supplied as a 0.2 µm filtered solution in MES, NaCl and Glycerol. |
| Shipping | The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below. |

GENE INFORMATION

| | |
|------------------------|---|
| Gene Name | CTSS cathepsin S [Homo sapiens (human)] |
| Official Symbol | CTSS |
| Synonyms | Cathepsin S; CTSS; EC 3.4.22; EC 3.4.22.27; FLJ50259; MGC3886 |
| Gene ID | 1520 |
| mRNA Refseq | NM_004079.5 |

 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



Protein Refseq NP_004070.3

UniProt ID P25774

 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