



Recombinant Protein Technical Manual

Recombinant Mouse Cystatin E/CST6 Protein (His Tag)(Active)

RPES3884

Product Data:

Product SKU: RPES3884

Size: 10 μ g

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_082899.1

Protein Information:

Molecular Mass: 15.2 kDa

AP Molecular Mass: 20 kDa

Tag: C-His

Bio-activity: Measured by its ability to inhibit papain cleavage of a fluorogenic peptide substrate ZFR-AMC, R&D Systems, Catalog # ES009. The IC₅₀ is < 20 nM.

Purity: > 90 % as determined by SDS-PAGE

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

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

Application:

Synonyms: 1110017E11Rik;ichq;N28197

Immunogen Information:

Sequence: Met 1-Ala 152

Background:

Cystatin E/M, also referred to as CST6, is a member of type 2 cysteine proteinase inhibitors of the cystatin superfamily, and inhibits papain and cathepsin B. Cystatin E is a low molecular mass secreted protein existing in both a glycosylated (17 kDa) and an unglycosylated (14 kDa) form, with two characteristic intrachain disulfide bridges. Expression of cystatin M/E is found to be restricted to the epidermis, more specifically in the stratum granulosum, sweat glands, sebaceous glands, and the hair follicles. In addition to its function as a cysteine protease inhibitor, cystatin M/E also serves as a target for cross-linking by transglutaminases. Accordingly, cystatin M/E was suggested to be involved in barrier formation and maintenance. Furthermore, studies have revealed that cystatin M/E is frequently epigenetically inactivated during breast carcinogenesis, and thus be regarded as a candidate of tumour suppressor gene.