

Recombinant Mouse Cystatin E/CST6 Protein (His Tag)

Catalog Number: PKSM040441

Note: Centrifuge before opening to ensure complete recovery of vial contents.

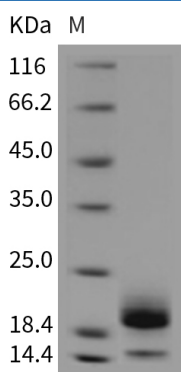
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse Cystatin E/CST6 protein Met 1-Ala 152, with an C-terminal His
Calculated MW	15.2 kDa
Observed MW	20 kDa
Accession	NP_082899.1
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.

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.