

Recombinant Human Cystatin A/CSTA Protein (His Tag)

Catalog No. PKSH031581

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

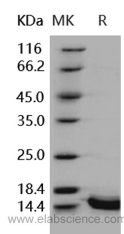
Description

| | |
|------------------------------------|---|
| Synonyms | Cystatin-A; Cystatin-AS; Stefin-A; CSTA; STF1; STFA |
| Species | Human |
| Expression Host | E.coli |
| Sequence | Ile 2-Phe 98 |
| Accession | P01040 |
| Calculated Molecular Weight | 12.4 kDa |
| Observed molecular weight | 14 kDa |
| Tag | N-His |

Properties

| | |
|-----------------------|--|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| 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 50mM Tris, 1mM EDTA, pH 7.5 |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



Background

Cystatin-A, also known as Cystatin-AS, Stefin-A and CSTA, is a cytoplasm protein which belongs to the cystatin family. Cystatin-A / CSTA is a cysteine proteinase inhibitor with a molecular mass of 11 kDa, and is located mainly in the keratohyaline granules of the stratum granulosum and the cornified envelope of the stratum corneum in the epidermis. The cystatins are a family of cysteine protease inhibitors with homology to chicken cystatin. Cystatins are physiological inhibitors of cysteine proteinases which are widely distributed in human tissues and fluids. Cystatins typically comprise about 115 amino acids, are largely acidic, contain four conserved cysteine residues known to form two disulfide bonds. Cystatins may be glycosylated and / or phosphorylated, with similarity to fetuins, kininogens, stefins, histidine-rich

For Research Use Only

glycoproteins and cystatin-related proteins. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired inhibitory activity. Cystatins mainly inhibit peptidases belonging to peptidase families C1 (papain family) and C13 (legumain family).