Recombinant human Cystatin C protein

Catalog Number: ATGP2040

PRODUCT INFORMATION

Expression system
E.coli

Domain
27-146aa

UniProt No.
P01034

NCBI Accession No.
NP_000090

Alternative Names
Cystatin C, ARMD11, MGC117328, Cystatin-C

PRODUCT SPECIFICATION

Molecular Weight
15.6 kDa (141aa) confirmed by MALDI-TOF

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 20% glycerol

Purity
> 95% by SDS-PAGE

Biological Activity
The IC50 value is < 2.0nM. The inhibitory function of Cystatin 3 on protease activity of papain was measured by a fluorometric assay using Z-FR-AMC at pH 7.5 at 25C.

Tag
His-Tag

Application
Enzyme Activity,SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2

Recombinant human Cystatin C protein

Catalog Number: ATGP2040

cystatins and the kininogens. The cystatin locus on chromosome 20 contains the majority of the type 2 cystatin genes and pseudogenes. CST3 is located in the cystatin locus and is the most abundant extracellular inhibitor of cysteine proteases, which is found in high concentrations in biological fluids and is expressed in virtually all organs of the body. Recombinant human CST3 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

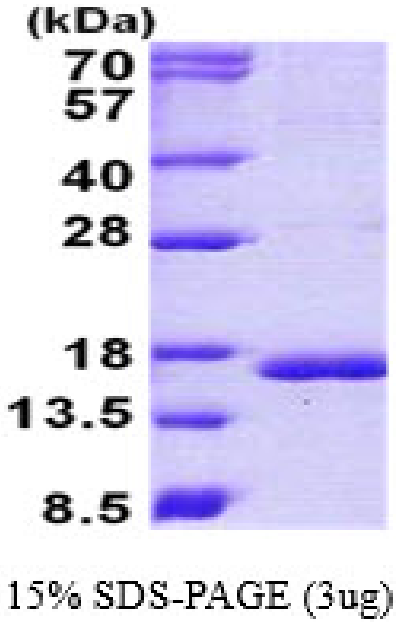
MGSSHHHHHH SSGLVPRGSH MSSPGKPPRL VGGPMDASVE EEGVRRALDF AVGEYNKASN DMYHSRALQV VRARKQIVAG VNYFLDVELG RTTCTKTQPN LDNCPFHDQP HLKRKAFCSF QIYAVPWQGT MTLSKSTCQD A

General References

Liu J. (2012) Transplant Proc. 44(5):1250-3.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.