

# Product Information

## MemDX™ Membrane Protein Human CST3 (Cystatin C) expressed in E. coli for Antibody

### Discovery

Cat. No.: **MP0010Q**

This product is for research use only and is not intended for diagnostic use.

This product is a 33.8 kDa Human CST3 membrane protein expressed in E. coli. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

CST3

#### Protein Length

Full-length

#### Protein Class

Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

#### Molecular Weight

33.8 kDa

#### Sequence

MGSSHHHHHHSSGLVPRGSHMENLYFQGSSPGKPPRLVGGPMDASVEEEGVRRALDFAVGEYNKASNDMYHSRALQVVRARKC

### Product Description

#### Expression Systems

E. coli

#### Tag

His

#### Form

Powder

#### Endotoxin

< 1 EU/μg

#### Purity

>95% as determined by SDS-PAGE and Coomassie blue staining

**Buffer**

0.2  $\mu$ M filtered solution of 20mM PB, 150mM NaCl, 1mM DTT, pH 7.2

**Storage**

Store at +4°C for up to one week or several months at -80°C

**Target****Target Protein**

CST3

**Full Name**

Cystatin C

**Introduction**

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 cystatins and the kininogens. The type 2 cystatin proteins are a class of cysteine proteinase inhibitors found in a variety of human fluids and secretions, where they appear to provide protective functions. The cystatin locus on chromosome 20 contains the majority of the type 2 cystatin genes and pseudogenes. This gene is located in the cystatin locus and encodes 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. A mutation in this gene has been associated with amyloid angiopathy. Expression of this protein in vascular wall smooth muscle cells is severely reduced in both atherosclerotic and aneurysmal aortic lesions, establishing its role in vascular disease. In addition, this protein has been shown to have an antimicrobial function, inhibiting the replication of herpes simplex virus. Alternative splicing results in multiple transcript variants encoding a single protein

**Alternative Names**

ARMD11; HEL-S-2; heme oxygenase (decycling) 2; HO-2

**Gene ID**

[1471](#)

**UniProt ID**

[P01034](#)