



# Recombinant Protein Technical Manual

## Recombinant Human Cystatin D Protein (His Tag)

RPES3810

### Product Data:

**Product SKU:** RPES3810

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** NP\_001891.2

### Protein Information:

**Molecular Mass:** 14.9 kDa

**AP Molecular Mass:** 15 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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 a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, pH 5.5.

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

**Application:**

**Synonyms:** Cystatin-D; Cystatin-5; CST5

## Immunogen Information:

**Sequence:** Gly21-Val142

## Background:

Cystatin-D is a protein that in humans is encoded by the CST5 gene. 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. 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 a protein found in saliva and tears. The encoded protein may play a protective role against proteinases present in the oral cavity.