



# Recombinant Protein Technical Manual

## Recombinant Human CD38 Protein (mFc Tag)

RPES4793

### Product Data:

**Product SKU:** RPES4793

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P28907

### Protein Information:

**Molecular Mass:** 56.5 kDa

**AP Molecular Mass:** 70-90 kDa

**Tag:** C-mFc

**Bio-activity:**

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

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 Tris, 150mM NaCl, PH8.0.

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

**Application:**

**Synonyms:** ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1; ADP-ribosyl cyclase 1; Cyclic ADP-ribose hydrolase 1; CD38 antigen; CD38 molecule;CD38

## Immunogen Information:

**Sequence:** Val43-Ile300

## Background:

CD38, also called ADP-ribosyl cyclase, is a Type II integral membrane protein with 301 amino acids in length that belongs to the ADP-ribosyl cyclase family. It synthesizes the second messengers cyclic ADP-ribose and nicotinate-adenine dinucleotide phosphate, the former a second messenger for glucose-induced insulin secretion. And also moonlights as a receptor in cells of the immune system. CD38 is expressed in B and T lymphocytes, osteoclasts, and in cardiac, pancreatic, liver and kidney cells. Through its production of cyclic ADP-ribose, CD38 modulates calcium-mediated signal transduction in many types of cells, including neutrophils and pancreatic beta cells.