

# Recombinant Human CML1 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP50208

Size: 10ug, 100ug

Protein Name: Chemerin-like receptor 1 (Chemokine-like receptor 1) (G protein-coupled receptor ChemR23) (G protein-coupled receptor DEZ)

Synonym: CMKLR1, CHEMR23, DEZ

UniProt ID: Q99788

UniProt Link: [www.uniprot.org/uniprotkb/Q99788/entry](http://www.uniprot.org/uniprotkb/Q99788/entry)

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 373 AA

Molecular Weight: 42 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MRMEDEDYNTSISYGDEYPDYLDSIVVLEDLSPLEARVTRIFLVVYVSIVCFLGILGNGLVIIIATFKMKK  
TVNMVWFLNLAVADFLFNVFLPIHITYAAMDYHWVFGTAMCKISNFLLIHNMFTSVFLLTISSDRCISV  
LLPVWSQNHRSVRLAYMACMVIWVLAFFLSSPSLVFRDTANLHGKISCFNNFSLSTPGSSSWPTH  
QMDPVGYSRHMMVTVTRFLCGFLVPVLIITACYLTIVCKLQRNRLAKTKKPKIIVTIIITFFLCWCPYHT  
LNLELHHTAMPGSVFSLGLPLATALAIANSCMNPILYVFMGQDFKKFKVALFSRLVNALSEDGTHSS  
YPSHRSFTKMSSMNERTSMNERETGML

## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant Chemerin-like receptor 1 (Chemokine-like receptor 1) (G protein-coupled receptor ChemR23) (G protein-coupled receptor DEZ) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** Receptor for the chemoattractant adipokine chemerin/RARRES2 and for the omega-3 fatty acid derived molecule resolvin E1. Interaction with RARRES2 initiates activation of G proteins G(i)/G(o) and beta-arrestin pathways inducing cellular responses via second messenger pathways such as intracellular calcium mobilization, phosphorylation of MAP kinases MAPK1/MAPK3 (ERK1/2), TYRO3, MAPK14/P38MAPK and PI3K leading to multifunctional effects, like reduction of immune responses, enhancing of adipogenesis and angiogenesis (PubMed:27716822). Resolvin E1 down-regulates cytokine production in macrophages by reducing the activation of MAPK1/3 (ERK1/2) and NF-kappa-B. Positively regulates adipogenesis and adipocyte metabolism.; (Microbial infection) Acts as a coreceptor for several SIV strains (SIVMAC316, SIVMAC239, SIVMACL7E-FR and SIVSM62A), as well as a primary HIV-1 strain (92UG024-2).

**Subcellular Localization:** Cell membrane ; Multi-pass membrane protein . Note=Internalizes efficiently in response to RARRES2.

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.