

#### Synonym

C-C motif chemokine receptor 9,GPR28,CDw199,GPR-9-6,CC-CKR-9

#### Source

Human CCR9 Protein, His, Avitag&Flag Tag(CC9-H82D3) is expressed from human 293 cells (HEK293). It contains AA Thr 2 - Ala 244 & Lys 245 - Leu 369 (Accession # P51686-1).

Predicted N-terminus: Asp

## **Molecular Characterization**



This protein carries a Flag tag at the N-terminus and a polyhistidine tag at the C-terminus followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 47.7 kDa.

#### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

#### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

## **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

\*The DDM/CHS buffer (Cat. No. <u>DC-11</u>) is sold separately and not included in protein, you can follow <u>this link</u> for product information.

#### **Formulation**

This product is not suitable for cell based experiments due to cytotoxicity of DDM.

DDM and CHS are INDISPENSABLE to keep membrane protein soluble and active, under no circumastance should you remove DDM and CHS.

DDM/CHS buffer (DC-11) is sold separately and not included in protein, and please contact us if you need the buffer.

If glycerol is not compatible to your application, remove glycerol just before immediate experiment, and NEVER store glycerol-free protein solution.

Supplied as 0.2 μm filtered solution in 50 mM HEPES, 150 mM NaCl, DDM, CHS, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

## Shipping

This product is supplied and shipped with dry ice, please inquire the shipping

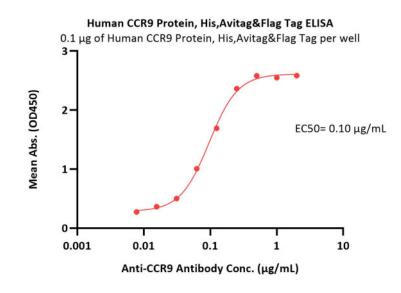
# Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

# **Bioactivity-ELISA**



Immobilized Human CCR9 Protein, His,Avitag&Flag Tag (Cat. No. CC9-H82D3) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Anti-CCR9 Antibody with a linear range of 0.08-0.25  $\mu$ g/mL (QC tested).



# Human CCR9 Protein, His, Avitag™&Flag Tag (Detergent)

Catalog # CC9-H82D3



## **Background**

The protein encoded by this gene is a G protein-coupled receptor with seven transmembrane domains that belongs to the beta chemokine receptor family. Chemokines and their receptors are key regulators of thymocyte migration and maturation in normal and inflammation conditions. This gene is differentially expressed in T lymphocytes of the small intestine and colon, and its interaction with chemokine 25 contributes to intestinal intra-epithelial lymphocyte homing to the small intestine. This suggests a role for this gene in directing immune responses to different segments of the gastrointestinal tract. This gene and its exclusive ligand, chemokine 25, are overexpressed in a variety of malignant tumors and are closely associated with tumor proliferation, apoptosis, invasion, migration and drug resistance. This gene maps to the chemokine receptor gene cluster. Multiple transcript variants encoding different isoforms have been found for this gene.

**Clinical and Translational Updates** 

