

## Product Information

**MemDX™ Membrane Protein Human CCR5 (C-C motif chemokine receptor 5) Expressed in HEK293 for Antibody Discovery, Partial (2-223 aa & 227-319 aa, C58Y, G163N, A233D, K303E)**

Cat. No.: **MPX0559K**

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

This product is a 46.0 kDa Human CCR5 membrane protein expressed in HEK293. 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

CCR5

#### Protein Length

Partial (2-223 aa & 227-319 aa, C58Y, G163N, A233D, K303E)

#### Protein Class

GPCR

#### Molecular Weight

46.0 kDa

#### TMD

7

#### Sequence

DYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNML  
VILILINYKRLKSMTDIYLLNLAISDLFFLLTPFWAHYAAAQWDFGNTM  
CQLLTGLYFIGFFSGIFFIILLTIDRYLAVVHAVFALKARTVTFGVVTSV  
ITWVVAVFASLPNIIFTRSQKEGLHYTCSSHFPYSQYQFWKNFQTLKIVI  
LGLVLPLLVMVICYSGILKTLLREKKRHRDVRIFTIMIVYFLFWAP  
YNIVLLNNTFQEFFGLNCCSSNRDLQAMQVTETLGMTHCCINPIYAFV  
GEEFRNYLLVFFQKHIKR

### Product Description

#### Activity

Yes

#### Expression Systems

HEK293

### Tag

Flag tag at the N-terminus and His tag at the C-terminus

### Protein Format

Detergent

### Form

Liquid

### Endotoxin

<1.0 EU per 1 µg of the protein by the LAL method.

### Purity

>85% as determined by SDS-PAGE.

### Buffer

Delivered as bulk protein in a 0.2 µm filtered solution of 50 mM HEPES, 150 mM NaCl, DDM, CHS, pH7.5 with glycerol as protectant.

### Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

## Target

### Target Protein

CCR5

### Full Name

C-C motif chemokine receptor 5

### Introduction

This gene encodes a member of the beta chemokine receptor family, which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. This protein is expressed by T cells and macrophages, and is known to be an important co-receptor for macrophage-tropic virus, including HIV, to enter host cells. Defective alleles of this gene have been associated with the HIV infection resistance. The ligands of this receptor include monocyte chemoattractant protein 2 (MCP-2), macrophage inflammatory protein 1 alpha (MIP-1 alpha), macrophage inflammatory protein 1 beta (MIP-1 beta) and regulated on activation normal T expressed and secreted protein (RANTES). Expression of this gene was also detected in a promyeloblastic cell line, suggesting that this protein may play a role in granulocyte lineage proliferation and differentiation. This gene is located at the chemokine receptor gene cluster region. An allelic polymorphism in this gene results in both functional and non-functional alleles; the reference genome represents the functional allele. Two transcript variants encoding the same protein have been found for this gene.

### Alternative Names

CCR5; CKR5; CCR-5; CD195; CKR-5; CCCKR5; CMKBR5; IDDM22; CC-CKR-5; C-C motif chemokine receptor 5 A159A; HIV-1 fusion coreceptor; chemokine (C-C motif) receptor 5; chemokine receptor CCR5; chemokine receptor CCR5 Delta32; chemr13; C-C motif chemokine receptor 5

### Gene ID

[1234](#)

### UniProt ID

[P51681](#)