

Product Information

MemDX™ Membrane Protein Human CCR5 (C-C motif chemokine receptor 5)

Cat. No.: **MP0009F**

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

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

Full Length

Protein Class

Receptor

Molecular Weight

40 kDa

TMD

7

Sequence

MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKR
LKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFII
LLTIDRYLAVVHAVFALKARTVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSS
HFPYSQYQFWKNFQTLKIVILGLVLP LLVMVICYSGILKTLLRCRNEKKRHRVRLIFTI
MIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
GEKFRNYLLVFFQKHIKRFCCKCSIFQQEAPERASSVYTRSTGEQEISVGL

Product Description

Activity

To be tested

Application

Screening & display technologies

Expression Systems

Cell-free expression system

Tag

Histidine tag fused to the N-terminal end of the protein

Protein Format

Proteoliposome

Form

Powder

Purification

Sucrose gradient

Purity

>50% by SDS-Page and Coomassie Blue staining

Buffer

Tris 50mM, pH 7.5

Storage

Store at +4°C for up to one week or several months at -80°C

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

CKR5, CCR-5, CD195, CKR-5, CCCKR5, CMKBR5, IDDM22, CC-CKR-5

Gene ID

[1234](#)

UniProt ID

[P51681](#)