

Product Information

NativeExtract™ Human CCR5 Membrane Protein (Full length, Super Nanodisc)

Cat. No.: S01YF-1023-KX394

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

This product is recombinant Human CCR5 protein in native nanodisc form. The synthetic compound we developed can solubilize the CCR5 protein from membrane while retaining the native structure.

Product Specifications

Host Species

Human

Target Protein

CCR5

Protein Length

Full length

Molecular Weight

40.5 kDa

Sequence

Accession # P51681

Product Description

Activity

Yes

Application

ELISA; SPR Binding Assays; Phage Display Screening; Immunity; Functional Assays

Expression Systems

HEK293 expression system

Tag

Flag tag at the C-terminus

Protein Format

Native Nanodisc

Form

Liquid

Buffer

20 mM Tris-HCl, 150 mM NaCl, pH 8.0

Storage

The product should be stored at -20°C to -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; C-C chemokine receptor type 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; CCR5; C-C motif chemokine receptor 5

Gene ID

1234

UniProt ID

P51681