MCE MedChemExpress

Product Data Sheet

CCR5 Protein, Mouse (P. pastoris, His)

Cat. No.: HY-P700540

Synonyms: CCR5; chemokine (C-C motif) receptor 5 (gene/pseudogene); chemokine (C C motif) receptor 5,

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

CKR-5; CCCKR5; CMKBR5; CC-CKR-5; FLJ78003;

Species: Mouse
Source: P. pastoris

Accession: P51682 (Q263-L354)

Gene ID: 12774

Molecular Weight: 12.6 kDa

PROPERTIES

AA Sequence

QEFFGLNNCS SSNRLDQAMQ ATETLGMTHC CLNPVIYAFV GEKFRSYLSV FFRKHMVKRF CKRCSIFQQD NPDRASSVYT

R S T G E H E V S T G L

Appearance Lyophilized powder.

Formulation Lyophilized from a 0.2 μm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Endotoxin Level <1 EU/µg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH₂O.

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is

recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

CCR5 Protein, functioning as a receptor for several inflammatory CC-chemokines, including CCL3/MIP-1-alpha, CCL4/MIP-1-beta, and RANTES, plays a pivotal role in transducing signals by elevating intracellular calcium ion levels. This receptor may contribute to the control of granulocytic lineage proliferation or differentiation and is integral to T-lymphocyte migration to infection sites, functioning as a chemotactic receptor. Interactions with PRAF2, GRK2, ARRB1, ARRB2, and CNIH4 further underscore the complexity of CCR5's regulatory network. Notably, efficient ligand binding to CCL3/MIP-1alpha and CCL4/MIP-1beta necessitates sulfation, O-glycosylation, and sialic acid modifications. Additionally, glycosylation on Ser-6 is essential for optimal CCL4 binding. The interaction with S100A4 highlights a stimulating effect on T-lymphocyte chemotaxis, emphasizing the multifaceted roles of CCR5 in immune responses and cellular signaling pathways.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com