

# Product Data Sheet

# Inhibitors • Screening Libraries • Proteins

## CCR6 Protein, Human (Cell-Free, His)

Cat. No.:	HY-P702234
Synonyms:	C-C chemokine receptor type 6; Chemokine receptor-like 3; CKR-L3; DRY6; G-protein coupled receptor 29; GPR-CY4; GPRCY4; LARC receptor
Species:	Human
Source:	E. coli Cell-free
Accession:	P51684 (M1-M374)
Gene ID:	1235
Molecular Weight:	46.5 kDa

### PROPERTIES

AA Sequence	
	MSGESMNFSD VFDSSEDYFV SVNTSYYSVD SEMLLCSLQE
	VRQFSRLFVP IAYSLICVFG LLGNILVVIT FAFYKKARSM
	TDVYLLNMAI ADILFVLTLP FWAVSHATGA WVFSNATCKL
	LKGIYAINFN CGMLLLTCIS MDRYIAIVQA TKSFRLRSRT
	LPRSKIICLV VWGLSVIISS STFVFNQKYN TQGSDVCEPK
	YQTVSEPIRW KLLMLGLELL FGFFIPLMFM IFCYTFIVKT
	LVQAQNSKRH KAIRVIIAVV LVFLACQIPH NMVLLVTAAN
	LGKMNRSCQS EKLIGYTKTV TEVLAFLHCC LNPVLYAFIG
	QKFRNYFLKI LKDLWCVRRK YKSSGFSCAG RYSENISRQT
	SETADNDNAS SFTM
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Endeterin Level	
Endotoxin Level	<1 EU/µg, determined by LAL method.
Deservititution	
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/mL in ddH <sub>2</sub> O. For long term storage it is
	recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers
	could use it as reference.
Storege 9 Stobility	$(1) = \frac{1}{2} \left( \frac{1}{2} + \frac{1}{2} \right) \left( \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \right) \left( \frac{1}{2} + \frac{1}{2} +$
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	Deem temperature in centinentel UC menuner cleanthere
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background The CCR6 Protein acts as a receptor for the C-C type chemokine CCL20, transducing signals by increasing intracellular

calcium ion levels upon binding to its major ligand. Notably, CCR6 can also function as a receptor for non-chemokine ligands, such as beta-defensins, including DEFB1, DEFB4, and DEFB4A/B. The interaction between CCR6 and DEFB1 is crucial for regulating sperm motility and bactericidal activity. Additionally, CCR6 plays a pivotal role in chemotaxis, being responsible for the migration of dendritic cells, effector/memory T-cells, and B-cells, particularly at skin and mucosal surfaces under various conditions, including inflammation and pathology such as cancer and autoimmune diseases. CCR6mediated signals are essential for immune responses in the intestinal mucosa, modulating inflammatory responses to tissue insult and trauma. Moreover, CCR6 is indispensable for recruiting pro-inflammatory IL17-producing helper T-cells (Th17) and regulatory T-cells (Treg) to sites of inflammation, influencing thymocyte precursor migration events, B-cell localization in Peyers-patches, and the efficient secondary recall response of memory B-cells. It also positively regulates sperm motility and chemotaxis through its binding to CCL20.

### Caution: Product has not been fully validated for medical applications. For research use only.

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