

GPCR Protein Catalogue

C-C Chemokine Receptor type 2 isoform A

Product specification

Acronym: CCR2a Class: GPCR class A

Origin: Human

Molecular weight: 41 kDa

Application: Screening & Display Technologies,

Antibody development, Structural Biology

Purity: >50%

Activity: To be tested **Length:** Full Length

TMD: 7

Biological function: Monocyte chemotaxis

Product description

CCR2 is a member of the beta chemokine receptor family. This gene encodes two isoforms of a receptor for monocyte chemoattractant protein-1, a chemokine which specifically mediates monocyte chemotaxis. Monocyte chemoattractant protein-1 is involved in monocyte infiltration in inflammatory diseases such as rheumatoid arthritis as well as in the inflammatory response against tumors. The receptors encoded by this gene mediate agonist-dependent calcium mobilization and inhibition of adenylyl cyclase.

Protein Source: hCCR2a wild type protein (Human CCR2a)

Fig. 1: AA sequence of hCCR2a protein

10	20	36	49	50
MEDNNMLPQF	IHGILSTSHS	LFTRSIQELD	EGATTPYDYD	DGEPCHKTSV
50	70	86	90	100
KQIGAWILPP	LYSLVFIFGF	VGNMLVIIIL	IGCKKLKSMT	DIYLLNLAIS
110	120	130	149	150
DIFITIPE	WAHYAANFWV	FGNTMCKVFT	GLYHTGYEGG	TEFTTILTTD
150	170	180	199	200
KYLAIVHAVE	ALKARIVIFG	VTTSVVTWVV	AVEASLPG11	FTKSKQDDHH
210	220	230	240	250
YTCGPYFTQL	WKNFQTIMRN	ILSLILPLLV	MVICYSGILH	TLFRCRNEKK
250	270	286	299	300
RHRAVRLIFA	INIVYFLFWT	PYNIVLFLTT	FQESLGMSNC	VIDKHLDQAM
310	320	336	349	350
QVTETLGMTH	CCINPVIYAF	VGEKFRRYLS	IFFRKHIAKR	LCKQCPVFYR
350	370			
ETAURVSSTE	TPSTGEQEVS	VGL		

Affinity Tag: Histidine tag fused to the N-terminal end of the protein.

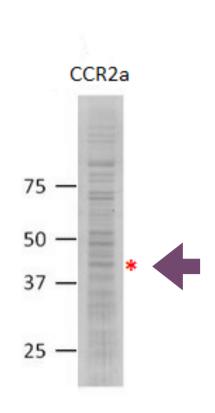
Production conditions: hCCR2a is expressed in a cell-free expression system in the presence of lipid vesicles. 100 µg can be produced and qualified in about 1 week.

Quality analysis

Purity: Typically > 50% as determined by SDS-Page and Coomassie Blue staining.

Purification procedure: As standard, hCCR2a proteoliposomes are purified on a sucrose gradient. Further purification steps can be added if required.

Fig.2: Proteoliposome hCCR2a after purification (Western blot identification).



Formulation

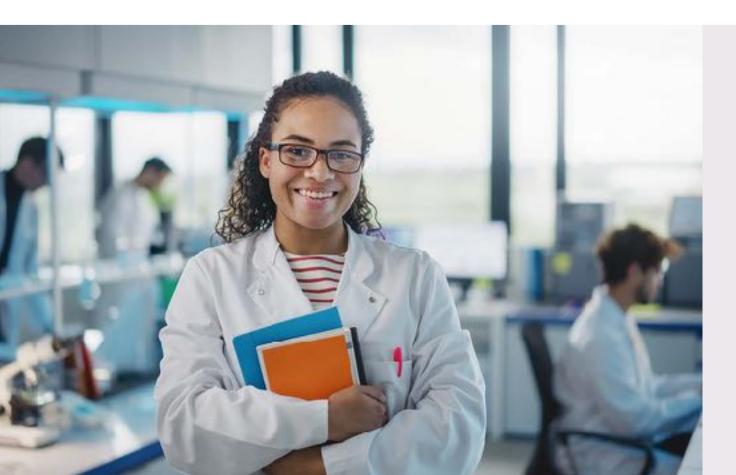
Buffer: Available in Tris 50mM, pH 7.5. Other buffers or customized formulation can be provided upon request..

Customized Hydrophobic matrix: Customized formulation with specific lipids like PEGylated or biotinylated lipids can be used upon request, as well as targeting molecules..

Storage/Stability: Store at $+4\text{\^A}^{\circ}\text{C}$ for up to one week or several months at $-80\text{\^A}^{\circ}\text{C}$. Aliquot for storage. <u>Do not freeze-thaw after aliquoting.</u>

Use restrictions: For life science research use only.

Available sizes: $10 \mu g$, $20 \mu g$, $100 \mu g$, $200 \mu g$, $500 \mu g$, bulk



Need a specific amount, a quote or any additional information?
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