



# Rat Anti-Human CCR5 Monoclonal Antibody, clone HEK/1/85a/7a [Functional Grade] (CABT-Z656R)

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

## PRODUCT INFORMATION

<b>Product Overview</b>	Low endotoxin level ( $\leq 1.0$ EU/mg) monoclonal antibody recognizes recognizes an epitope on human CCR5. More Lower endotoxin level ( $\leq 0.5$ EU/mg) antibody is also available.
<b>Immunogen</b>	CHO cells transfected with full-length human CD195 (CCR5).
<b>Isotype</b>	IgG2b, $\kappa$
<b>Source/Host</b>	Rat
<b>Species Reactivity</b>	Human
<b>Clone</b>	HEK/1/85a/7a
<b>Purification</b>	Protein A or G purified
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	FC, ICC Recommended concentration: FC: $\leq 1$ $\mu$ g per $10^6$ cells in a volume of 100 $\mu$ l or 100 $\mu$ l of whole blood.
<b>Format</b>	Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	1 mg
<b>Buffer</b>	0.01 M phosphate buffered saline (PBS) pH 7.2 - 7.4, 150 mM NaCl with no carrier protein,

potassium, calcium or preservatives added. Endotoxin Level  $\leq$  1.0 EU/mg as determined by the LAL method

Preservative	None
Storage	Functional grade biosimilar antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80°C. Avoid Repeated Freeze Thaw Cycles.
Ship	Wet ice

## BACKGROUND

Introduction	CCR5 is expressed on memory T cells, macrophages, and immature dendritic cells (DCs). CCR5 is a 45 kDa seven-transmembrane G-protein-coupled receptor (GPCR). CCR5 is expressed on a subset of memory T cells, macrophages, and immature dendritic cells (DCs) and is upregulated by proinflammatory cytokines. CCR5 binds to inflammatory CC-chemokines, including CCL3 (macrophage inflammatory protein (MIP)-1 $\alpha$ ), CCL4 (MIP-1 $\beta$ ), and RANTES, which increases intracellular calcium levels and results in cytoskeletal rearrangement and chemotactic cell migration. CCR5 is also the coreceptor for HIV-1 following binding of viral gp120 to CD4. The levels of CCR5 on cells influence the rate of entry of HIV-1, and patients with lower levels of CCR5 exhibit immunity against infection. CCR5 also contributes to other human diseases, including type I diabetes and cancer.
Keywords	CCR5;chemokine (C-C motif) receptor 5;C-C chemokine receptor type 5;AM4 7;C C chemokine receptor type 5;C C CKR 5

## GENE INFORMATION

Gene Name	CCR5
Entrez Gene ID	<a href="#">1234</a>
UniProt ID	<a href="#">P51681</a>