

Alternate Names	CMKOR1, CXC-R7, CXCR-7, CXCR7, GPR159, RDC-1, RDC1
Isotype	IgG2a
Conjugate	Unconjugated
Background	Human atypical chemokine receptor 3 (ACKR3) is also known as C-X-C chemokine receptor type 7 (CXCR-7) and G-protein coupled receptor 159 (GPR159). It is a 7-transmembrane G protein-coupled receptor (GPCR); a Class A GPCR. ACKR3/CXCR7 triggers signaling pathways solely mediated by β -arrestin. ACKR3/CXCR7 is known as an "interceptor" (internalizing receptor) or chemokine-scavenging receptor or chemokine decoy receptor resulting in chemokine sequestration. Upon chemokine binding to ACKR3/CXCR7 beta-arrestin recruitment is induced, leading to ligand internalization and activation of MAPK signaling pathway. ACKR3/CXCR7 is a therapeutic target due to being a coreceptor for human immunodeficiency viruses (HIV). Human ACKR3 protein has >90% sequence homology with mouse ACKR3.

Product Details

Specificity	Detects human atypical chemokine receptor 3 ACKR3/CXCR7 transfectants but not irrelevant transfectants in flow cytometry.
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	ACKR3/CXCR7 N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # P25106
Formulation / Storage buffer	Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4 with 10% trehalose as protectant



Anti-Human ACKR3 Monoclonal Antibody

Product Code: CABh-25380

Clone: 2E12-D7

For Research Use Only (RUO)

Reconstitution

For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL. Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

For 25µg product size:

Reconstitute with 50 µL sterile deionized water.

For 100µg product size:

Reconstitute with 200 µL sterile deionized water.

Shipping

Frozen Ice Packs

Purification

Affinity Enrichment

Stability & Storage

-20°C

Verified Application

ELISA, Flow cytometry

Recommended Usage

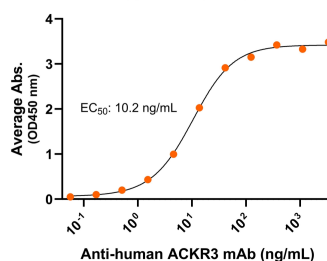
ELISA: starting concentration 1 µg/mL

Flow cytometry: 0.8 µg/1E6 cells

Bioactive Data, Detection of Antigen by:

ELISA

Anti-human ACKR3 Monoclonal Antibody, ELISA
0.2µg of ACKR3 protein per well



Immobilized human ACKR3 fragment at 2 µg/mL (100 µL/well) can bind Mouse Anti-Human ACKR3 Monoclonal Antibody (Cat. No. CABh-25380) with half maximal effective concentration (EC₅₀) range of 5.1-20.4 ng/mL (QC tested).

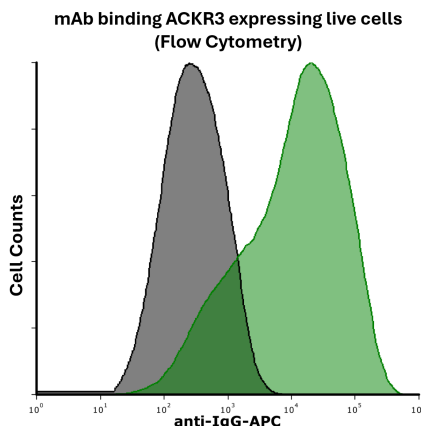
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Flow Cytometry



Detection of ACKR3 expressed on HEK293 cell surface transiently transfected with full-length human ACKR3 by Flow Cytometry. HEK293 cell line transfected with human ACKR3 was stained with isotype control (black curve) or mouse Anti-Human ACKR3 Monoclonal Antibody (Cat. No. CABh-25380) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	ligand internalization and activation of MAPK signaling pathway
Ligand / Receptor	CXCL12/SDF-1, CXCL11, macrophage inhibitory factor (MIF), adrenomedullin (ADM), opioid peptides, viral chemokine vCCL2
Cell Type	monocytes, basophils, B-cells, umbilical vein endothelial cells (HUVEC) and B-lymphoblastoid cells with lower expression detected in CD4+ T-lymphocytes and natural killer cells
Molecular Family	G protein-coupled receptor, chemokine receptor
Gene ID	P25106