

Product datasheet for **MG220989**

Ackr2 (NM_021609) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ackr2 (NM_021609) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ackr2
Synonyms:	Al464239; Ccbp2; CCR9; CCR10; Cmkbr9; D6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG220989 representing NM_021609 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCACCGTTGCTTCCCCTGCTCTCACCACCGTCGGTCCGAGAACAGCAGCTCCATCTACGACT
ACGACTACTTAGATGATATGACCATCTTGGTTTGCAGGAAGGACGAGGTCTGCTCTTGGAAAGTCTT
TCTGCCGGTCGTCTACAGCCTGATCTTCGTGCTGGGCTTGGCTGGAAACCTCCTCCTCTGGTGGTGTG
CTCCACTCTGCACCTCGAAGACGGACGATGGAGCTTTACCTGCTGAACCTGGCCGTCTCCAACCTCTGT
TTGTAGTACTATGCCCTTCTGGCCATCTCTGTGGCCTGGCATTGGGTTTTTGGTAGTTTCTGTGCAA
GGTGATAAGCACTCTACTCTATTAACCTTTACTGTGGTATCTTCTTCAACCTGCATGAGCCTGGAC
AAATACCTGGAGATTGTCCACGCTCAGCCTCTCCACAGACCGAAGGCCAGTTTCAGGAACCTGCTTCTCA
TTGTATGGTGTGGATCACATCCCTGGCCATCTCTGTCCAGAAATGGTCTTTGTGCAGATCCACCAGAC
CTTAGATGGTGTGGCACTGCTATGCGGATTTGGCGGACATGCGACCATTTGGAAGCTGTACCTGCGC
TTCCAGCTGAACCTTCTGGGTTTCTCCTCCACTCTTGGCCATGATCTTCTTTACTCCCGCATCGGT
GCGTCTGGTCAGGCTGAGGCCGCCAGGCCAGGGCCGGCTCTGAGGATGGCCGCGCCCTGGTGTAGT
TTTCTTTCATGCTGTGGTCCCATATAACCTCACCTTGTCTGCACTCGTTGCTGGACCTGCATGCTTT
GGAACTGTGAGATCAGCCACCGTCTGGACTATACGTTGCAGGTGACAGAGAGCCTGGCCTCTCCACT
GCTGCTTACCCCGTCTCTACGCTTCTGCAGTCACCGCTTCCGCGGTACCTGAAGCATTTCTGTG
TGTGATGTTGAGATGGCACCAGGCACCTGGCACCCCTTCTCTAACCATTTCTGAGAGCAGAGGGTACT
GCCAGGAAGACGTGGTCAGCATGAATGACCTTGGGGAGAGGCAGTCTGAGGACTCCCTAACAGGGGG
AGATGGGGAATACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG220989 representing NM_021609
 Red=Cloning site Green=Tags(s)

MPTVASPLPLTTVGSSENSSIYDYDYLDDMTILVCRKDEVLSFGRVFLPVVYSLIFVLGLAGNLLLLVVL
 LHSAPRRRTMELYLLNLAVSNLLFVVTMPFWAISVAWHWVFGSFLCKVISTLYSINFYCGIFFITCMSLD
 KYLEIVHAQPLHRPKAQFRNLLLIVMVWITSLAISVPEMVVFVQIHQTLDGVWHCYADFGGHATIWKLYLR
 FQLNLLGFLPLLAMIFFYSRIGCVLVRLLRPPQGGRALRMAAALVIVFFMLWFPYNLTLFLHSLDLHVF
 GNCEISHRLDYTLQVTESLAFSHCCFTPLVYAFCSHRFRRYLKAFLSVMLRWHQAPGTPSSNHSESSRVT
 AQEDVVSMDLGERQSEDSLNGEMGNT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021609

ORF Size: 1134 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_021609.4](#), [NP_067622.2](#)

RefSeq ORF: 1137 bp

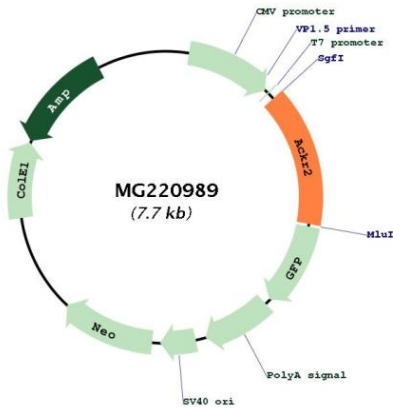
Locus ID: 59289

UniProt ID: [O08707](#)

Cytogenetics: 9 F4

Gene Summary: Atypical chemokine receptor that controls chemokine levels and localization via high-affinity chemokine binding that is uncoupled from classic ligand-driven signal transduction cascades, resulting instead in chemokine sequestration, degradation, or transcytosis. Also known as interceptor (internalizing receptor) or chemokine-scavenging receptor or chemokine decoy receptor. Acts as a receptor for chemokines including CCL2, CCL3, CCL3L1, CCL4, CCL5, CCL7, CCL8, CCL11, CCL13, CCL17, CCL22, CCL23, CCL24, SCYA2/MCP-1, SCY3/MIP-1-alpha, SCYA5/RANTES and SCYA7/MCP-3. Upon active ligand stimulation, activates a beta-arrestin 1 (ARRB1)-dependent, G protein-independent signaling pathway that results in the phosphorylation of the actin-binding protein cofilin (CFL1) through a RAC1-PAK1-LIMK1 signaling pathway. Activation of this pathway results in up-regulation of ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation. By scavenging chemokines in tissues, on the surfaces of lymphatic vessels, and in placenta, plays an essential role in the resolution (termination) of the inflammatory response and in the regulation of adaptive immune responses. Plays a major role in the immune silencing of macrophages during the resolution of inflammation. Acts as a regulator of inflammatory leukocyte interactions with lymphatic endothelial cells (LECs) and is required for immature/mature dendritic cells discrimination by LECs.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG220989