

Product datasheet for **RC206429**

CD16 (FCGR3A) (NM_000569) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD16 (FCGR3A) (NM_000569) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FCGR3A
Synonyms:	CD16; CD16A; FCG3; FCGR3; FCGR11; FCR-10; FCR11; FCR11A; IGFR3; IMD20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206429 representing NM_000569 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTGGAGGGCTGGGAAAGGCTGTTACTTCCTCCTGTCTAGTCGGTTTGGTCCCTTTAGGGCTCC
GGATATCTTTGGTGACTTGTCTCTCCAGTGTGGCATCATGTGGCAGCTGCTCCTCCAAGTCTGTCTGCT
ACTTCTAGTTTCAGCTGGCATGCGGACTGAAGATCTCCAAAGGCTGTGGTCTCCTGGAGCCTCAATGG
TACAGGGTCTCGAGAAGGACAGTGTACTCTGAAGTCCAGGGAGCCTACTCCCCTGAGGACAATTCCA
CACAGTGGTTTACAATGAGAGCCTCATCTCAAGCCAGGCTCGAGCTACTTCATTGACGCTGCCACAGT
CGACGACAGTGGAGAGTACAGGTGCCAGACAAACCTCTCCACCCTCAGTGACCCGGTGCAGCTAGAAGTC
CATATCGGCTGGCTGTTGCTCCAGGCCCTCGGTGGGTGTTCAAGGAGGAAGACCCTATTACCTGAGGT
GTCACAGCTGGAAGAACAAGTCTGCTGCTGATAAGGTACATATTTACAGAATGGCAAAGGCAGGAAGTATTT
TCATCATAAATTCTGACTTCTACATTTCCAAAAGCCACACTCAAAGACAGCGGCTCCTACTTCTGCAGGGGG
CTTGTGGGAGTAAAAATGTGTCTTCAGAGACTGTGAACATCACCATCAAGTTTGGCAGTGTCAA
CCATCTCATCTTTCCACCTGGGTACCAAGTCTCTTCTGCTTGGTGATGGTACTCCTTTTTGCAGT
GGACACAGGACTATATTTCTCTGTGAAGACAAACATTGAAAGCTCAACAAGAGACTGGAAGGACCATAAA
TTTAAATGGAGAAAGACCCTCAAGACAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC206429 representing NM_000569
 Red=Cloning site Green=Tags(s)

MGGGAGERLFTSSCLVGLVPLGLRISLVTCP LQC GIMWQLLLPTALLLLVSAGMRTEDLPKAVVFLEPQW
 YRVLEKDSVTLKCQGA YSPEDNSTQWFHNE SLISSQASSYFIDAATVDDSGEYRCQTNLSTLSDPVQLEV
 HIGWLLLQAPRWVFKEEDPIHLRCHSWKNTALHKVTYLQNGKGRKYFHNSDFYIPKATLKDSGSYFCRG
 LVGSKNVSSETVNITITQGLAVSTISSFFPPGYQVSFCLVMVLLFAVD TGLYFSVKTNIRSTRDWKDHK
 FKWRKDPQDK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

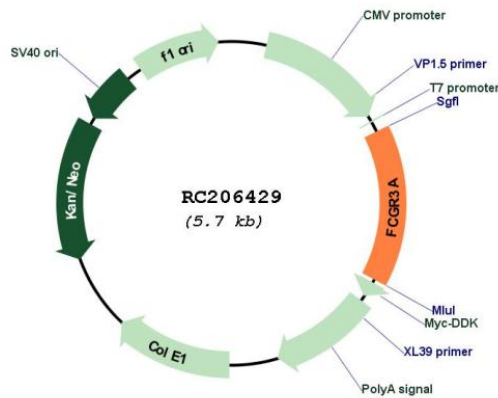
Chromatograms: https://cdn.origene.com/chromatograms/mg2536_d08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:

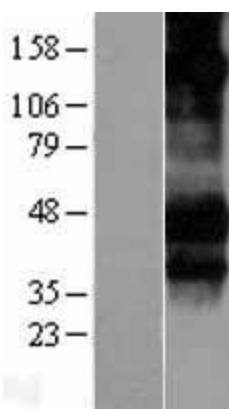


ACCN: NM_000569

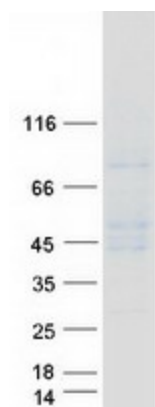
ORF Size:	870 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. 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:	<ol style="list-style-type: none">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_000569.4
RefSeq Size:	2406 bp
RefSeq ORF:	765 bp
Locus ID:	2214
UniProt ID:	P08637
Cytogenetics:	1q23.3
Domains:	ig, IG
Protein Families:	ES Cell Differentiation/IPS, Secreted Protein, Transmembrane
Protein Pathways:	Fc gamma R-mediated phagocytosis, Natural killer cell mediated cytotoxicity, Systemic lupus erythematosus
MW:	32.64 kDa

Gene Summary:

This gene encodes a receptor for the Fc portion of immunoglobulin G, and it is involved in the removal of antigen-antibody complexes from the circulation, as well as other responses, including antibody dependent cellular mediated cytotoxicity and antibody dependent enhancement of virus infections. This gene (FCGR3A) is highly similar to another nearby gene (FCGR3B) located on chromosome 1. The receptor encoded by this gene is expressed on natural killer (NK) cells as an integral membrane glycoprotein anchored through a transmembrane peptide, whereas FCGR3B is expressed on polymorphonuclear neutrophils (PMN) where the receptor is anchored through a phosphatidylinositol (PI) linkage. Mutations in this gene are associated with immunodeficiency 20, and have been linked to susceptibility to recurrent viral infections, susceptibility to systemic lupus erythematosus, and alloimmune neonatal neutropenia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2020]

Product images:

Western blot validation of overexpression lysate (Cat# [LY400194]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206429 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FCGR3A protein (Cat# [TP306429]). The protein was produced from HEK293T cells transfected with FCGR3A cDNA clone (Cat# RC206429) using MegaTran 2.0 (Cat# [TT210002]).