OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC124061

CD16 (FCGR3A) (NM_000569) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD16 (FCGR3A) (NM_000569) Human Untagged Clone
Tag:	Tag Free
Symbol:	CD16
Synonyms:	CD16; CD16A; FCG3; FCGR3; FCGRIII; FCR-10; FCRIII; FCRIIIA; IGFR3; IMD20
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC124061 sequence for NM_000569 edited (data generated by NextGen Sequencing)

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ATGGGTGGAGGGGCTGGGGAAAGGCTGTTTACTTCCTCCTGTCTAGTCGGTTTGGTCCCT
TTAGGGCTCCGGATATCTTTGGTGACTTGTCCTCTCCAGTGTGGCATCATGTGGCAGCTG
CTCCTCCCAACTGCTCTGCTACTTCTAGTTTCAGCTGGCATGCGGACTGAAGATCTCCCA
AAGGCTGTGGTGTTCCTGGAGCCTCAATGGTACAGGGTGCTCGAGAAGGACAGTGTGACT
CTGAAGTGCCAGGGAGCCTACTCCCCTGAGGACAATTCCACACAGTGGTTTCACAATGAG
AGCCTCATCTCAAGCCAGGCCTCGAGCTACTTCATTGACGCTGCCACAGTCGACGACAGT
GGAGAGTACAGGTGCCAGACAAACCTCTCCACCCTCAGTGACCCGGTGCAGCTAGAAGTC
CATATCGGCTGGCTGTTGCTCCAGGCCCCTCGGTGGGTGTTCAAGGAGGAAGACCCTATT
CACCTGAGGTGTCACAGCTGGAAGAACACTGCTCTGCATAAGGTCACATATTTACAGAAT
GGCAAAGGCAGGAAGTATTTTCATCATAATTCTGACTTCTACATTCCAAAAGCCACACTC
AAAGACAGCGGCTCCTACTTCTGCAGGGGGCTTGTTGGGAGTAAAAATGTGTCTTCAGAG
ACTGTGAACATCACCATCACTCAAGGTTTGGCAGTGTCAACCATCTCATCATTCTTTCCA
CCTGGGTACCAAGTCTCTTTCTGCTTGGTGATGGTACTCCTTTTTGCAGTGGACACAGGA
CTATATTTCTCTGTGAAGACAAACATTCGAAGCTCAACAAGAGACTGGAAGGACCATAAA
TTTAAATGGAGAAAGGACCCTCAAGACAAATGA

Clone variation with respect to NM_000569.6
93 a=>t;634 t=>g
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View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000569 unedited
NNCCCAACGCCTTCACGATTTGTGAAACGACTTCTATAGGCGGCACGCGATTCCCGGGCA
GATTCTGTGTGTGTCCTCAGCAGCTCAGCCACAGACCTTTGAGGGAGTAAAGGGGGCAGA
CCCACCCACCTTGCCTCCAGGCTCTTTCCTTCCTGGTCCTGTTCTATGGTGGGGCTCCCT
TGCCAGACTTCAGACTGAGAAGTCAGATGAAGTTTCAAGAAAAGGAAATTGGTGGGTGAC
AGAGATGGGTGGAGGGGCTGGGGAAAGGCTGTTTACTTCCTCCTGTCTAGTCAGTTTGGT
CCCTTTAAGGCTCCGGATATCTTTGGTGACTTGTCCTCTCCAGTGTGGCATCATGTGGCA
GCTGCTCCTCCCAACTGCTCTGCTACTTCTAGTTTCAGCTGGCATGCGGACTGAAGATCT
CCCAAAGGCTGTGGTGTTCCTGGAGCCTCAATGGTACAGGGTGCTCGAGAAAGACAGTGT
GACTCTGAAGTGCCAGGGAGCCTACTCCCCTGAGGACAATTCCACACAGTGGTTTCACAA
TGAGAGCCTCATCTCAAGCCAGGCCTCGAGCTACTTCATTGACGCTGCCACAGTCGACGA
CAGTGGAGAGTACAGGTGCCAGACAAACCTCTCCACCCTCAGTGACCCGGTGCAGCTAGA
AGTCCATATCGGCTGGCTGTTGCTCCAGGCCCCTCGGTGGGTGTTCAAGGAGGAAGACCC
TATTCACCTGAAGTGTCACAGCTGGAAGAACACTGCTCTGCATAAAGTCACATATTTACA
AGATGGCAAAAGCAGGAAGTATTTTCATCATAATTCTGACTTCTACATTCCAAAAGCCAC
ACTCAAAGACAGCGGCTCCTACTTCTGCAAGGGAGCTTGTTGGGAGTAAAAATGTGTCTT
CAGAAACTGTGA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000569 unedited
NAGGGTCAAGGGCTGCCACCCGGGTATCTGTTCAAGAAAACAGCTATGACCGCGGCCGCA
ATCTACAGCGGCCGCCCTCTTTTTTNTTTTTTATTTATTTTTTATTTTTTCTTTTTTTAT
CATTCATATTTTATTACCATGGTTTTCCCATCTTCTATCTAAAAGTAACATGCAATTTTT
TTTAAAATGCTTTATTGGAACCAAAAAATGTTGCGCTTAAAGCTTACAAAACAAAGACAG
CTAAAGCTTTCTTTCATAAACAACAATTGTCTTCTCCATCCCCACCTTATTGGAACTGAC
ATGATGAAAGATTTGAAAGTTTCATAACTTAACTCAGCGAAGCTCAGTAGTACATTTAGT
ATTGGTTATACAACATTTGTTTAATAAATGCAATGAACAAAGCTACACAGGAATTATATA
TTGAAGCAAAAAAAGTGGTTTTACAGTCCCTGCATTAACCTCTAATTCTTACTACCCTGG
CCAAAAAAGCATTTTCACCTCCTGCGCTTTCCTTCCTGTGTGCTTGAGGTTGGTTCTTTC
TTCTCAAGCTTTCTCATTCTGATGCTGAGATAGTTCTGTTCACTTAGCAACTTGGGACAG
AGACACAAGGTTTGTTCTGTACTTTCTTTTCCACCCCACCCCCCACCGAAATCCTCAATC
CCCTTCCTAAGACCATTTTCTACTCCTAACATTAAAAAGACTCATCGTTATATACTTGAG
AAATGGTCCAATTCTTATAAAATCCCCCTGGAAGACTCTATTTCTACCTCCCCCCCATGA
ATTTCCTGGTAATTCCCCCTACGGTTATAGTTTTAAGAAAACACCCTTTTTTCTGGGGCT
AAGATGGAAACCACCCCCCTTAAACTATCCTGGACT

Restriction Sites: Please inquire

ACCN: NM_000569

Insert Size: 2100 bp

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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
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_000569.6, NP_000560.5
RefSeq Size:	2406 bp
RefSeq ORF:	873 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

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]
Transcript Variant: This variant (1) retains an intron in its 5' UTR and 5' coding region compared to variant 3. The encoded isoform (a) has a longer and distinct N-terminus compared to isoform c. This isoform (a) lacks a predicted signal peptide compared to isoform c.