

## Product datasheet for **TR313021**

### CD16 (FCGR3A) Human shRNA Plasmid Kit (Locus ID 2214)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	CD16 (FCGR3A) Human shRNA Plasmid Kit (Locus ID 2214)
Locus ID:	2214
Synonyms:	CD16; CD16A; FCG3; FCGR3; FCGR11; FCR-10; FCR11; FCR11A; IGFR3; IMD20
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	FCGR3A - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2214). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_000569</a> , <a href="#">NM_001127592</a> , <a href="#">NM_001127593</a> , <a href="#">NM_001127595</a> , <a href="#">NM_001127596</a> , <a href="#">NM_001329120</a> , <a href="#">NM_001329122</a> , <a href="#">NM_000569.1</a> , <a href="#">NM_000569.2</a> , <a href="#">NM_000569.3</a> , <a href="#">NM_000569.4</a> , <a href="#">NM_000569.5</a> , <a href="#">NM_000569.6</a> , <a href="#">NM_000569.7</a> , <a href="#">NM_001127596.1</a> , <a href="#">NM_001127593.1</a> , <a href="#">NM_001127595.1</a> , <a href="#">NM_001127592.1</a> , <a href="#">NM_001127592.2</a> , <a href="#">BC017865</a> , <a href="#">BC036723</a> , <a href="#">BC036723.1</a> , <a href="#">BC033678</a> , <a href="#">NM_001127595.2</a> , <a href="#">NM_001127596.2</a>
UniProt ID:	<a href="#">P08637</a>
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]



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- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).