

Product datasheet for TR519050

OriGene Technologies, Inc.

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Fcer1g Mouse shRNA Plasmid (Locus ID 14127)

Product data:

Product Type: shRNA Plasmids

Product Name: Fcer1g Mouse shRNA Plasmid (Locus ID 14127)

Locus ID: 14127

Synonyms: Al573376; CD23; Fce1g; FcepsilonRI; FcR-gamma; FcRgamma; FcR[g]; Ly-50

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Fcer1g - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

14127). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC034163, NM 010185, NM 010185.1, NM 010185.2, NM 010185.3, NM 010185.4</u>

UniProt ID: P20491

Summary: Adapter protein containing an immunoreceptor tyrosine-based activation motif (ITAM) that

transduces activation signals from various immunoreceptors. As a component of the high-affinity immunoglobulin E (IgE) receptor, mediates allergic inflammatory signaling in mast cells (PubMed:14764707). As a constitutive component of interleukin-3 receptor complex, selectively mediates interleukin 4/IL4 production by basophils, priming T-cells toward effector T-helper 2 subset (PubMed:19098920). Associates with pattern recognition receptors CLEC4D and CLEC4E to form a functional signaling complex in myeloid cells. Binding of mycobacterial trehalose 6,6'-dimycolate (TDM) to this receptor complex leads to phosphorylation of ITAM, triggering activation of SYK, CARD9 and NF-kappa-B, consequently driving maturation of antigen-presenting cells and shaping antigen-specific priming of T-cells toward effector T-helper 1 and T-helper 17 cell subtypes (PubMed:23602766) (Probable). May function cooperatively with other activating receptors. Functionally linked to integrin beta-2/ITGB2-mediated neutrophil activation (PubMed:17086186). Also involved in integrin alpha-2/ITGA2-mediated platelet activation (PubMed:9171347).[UniProtKB/Swiss-Prot Function]



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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. 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).