

Product datasheet for TL306202

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EMC9 Human shRNA Plasmid Kit (Locus ID 51016)

Product data:

Product Type: shRNA Plasmids

Product Name: EMC9 Human shRNA Plasmid Kit (Locus ID 51016)

Locus ID: 51016

Synonyms: C14orf122; CGI-112; FAM158A

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: EMC9 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 51016).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 016049, NM 001346874, NM 001346875, NM 001346876, NM 001346877, NM 016049.1,

NM 016049.2, NM 016049.3, BC002491, BC002491.2, NM 016049.4

UniProt ID: Q9Y3B6

Summary: Part of the endoplasmic reticulum membrane protein complex (EMC) that enables the

energy-independent insertion into endoplasmic reticulum membranes of newly synthesized

membrane proteins (PubMed:30415835, PubMed:29809151, PubMed:29242231,

PubMed:32459176). Preferentially accommodates proteins with transmembrane domains that are weakly hydrophobic or contain destabilizing features such as charged and aromatic

residues (PubMed:30415835, PubMed:29809151, PubMed:29242231). Involved in the

cotranslational insertion of multi-pass membrane proteins in which stop-transfer membrane-

anchor sequences become ER membrane spanning helices (PubMed:30415835,

PubMed:29809151). It is also required for the post-translational insertion of tail-anchored/TA proteins in endoplasmic reticulum membranes (PubMed:29809151, PubMed:29242231). By mediating the proper cotranslational insertion of N-terminal transmembrane domains in an N-exo topology, with translocated N-terminus in the lumen of the ER, controls the topology of multi-pass membrane proteins like the G protein-coupled receptors (PubMed:30415835). By regulating the insertion of various proteins in membranes, it is indirectly involved in many

cellular processes (Probable).[UniProtKB/Swiss-Prot Function]







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).