

Product datasheet for **KN310624**

Myo18a Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)
Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA: GFP-puro
Symbol: Myo18a
Locus ID: 360013
Components: **KN310624G1**, Myo18a gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAAGAGATGAGCATGCGCCG
KN310624G2, Myo18a gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGATGTCTGCGGCAGAACTG
KN310624D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG ATC

GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_001291212](#), [NM_001291213](#), [NM_001291214](#), [NM_001291215](#), [NM_011586](#)

UniProt ID:

[Q9JMH9](#)

Synonyms:

MAJN; MyoPDZ; MysPDZ; SP-R210

Summary:

May link Golgi membranes to the cytoskeleton and participate in the tensile force required for vesicle budding from the Golgi. Thereby, may play a role in Golgi membrane trafficking and could indirectly give its flattened shape to the Golgi apparatus (PubMed:19837035). Alternatively, in concert with LURAP1 and CDC42BPA/CDC42BPB, has been involved in modulating lamellar actomyosin retrograde flow that is crucial to cell protrusion and migration (By similarity). May be involved in the maintenance of the stromal cell architectures required for cell to cell contact (PubMed:10733906). Regulates trafficking, expression, and activation of innate immune receptors on macrophages. Plays a role to suppress inflammatory responsiveness of macrophages via a mechanism that modulates CD14 trafficking (PubMed:25965346). Acts as a receptor of surfactant-associated protein A (SFTPA1/SP-A) and plays an important role in internalization and clearance of SFTPA1-opsionized *S.aureus* by alveolar macrophages (PubMed:21123169). Strongly enhances natural killer cell cytotoxicity (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:

