

Product datasheet for RC200818L3

OriGene Technologies, Inc.

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MDS028 (ITFG2) (NM_018463) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MDS028 (ITFG2) (NM_018463) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: MDS028

Synonyms: FGGAP1; MDS028

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The ORF insert of this clor

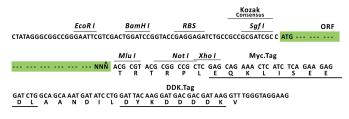
Sequence:

The ORF insert of this clone is exactly the same as(RC200818).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_018463

ORF Size: 1341 bp





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OTI Disclaimer: 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

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

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: <u>NM 018463.2</u>

 RefSeq Size:
 2379 bp

 RefSeq ORF:
 1344 bp

 Locus ID:
 55846

 UniProt ID:
 Q969R8

Cytogenetics: 12p13.33

Domains: FG-GAP

Protein Families: Druggable Genome

MW: 49.3 kDa

Gene Summary: As part of the KICSTOR complex functions in the amino acid-sensing branch of the TORC1

signaling pathway. Recruits, in an amino acid-independent manner, the GATOR1 complex to the lysosomal membranes and allows its interaction with GATOR2 and the RAG GTPases. Functions upstream of the RAG GTPases and is required to negatively regulate mTORC1 signaling in absence of amino acids. In absence of the KICSTOR complex mTORC1 is

constitutively localized to the lysosome and activated. The KICSTOR complex is also probably

involved in the regulation of mTORC1 by glucose.[UniProtKB/Swiss-Prot Function]