

Product datasheet for RC203641L3

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OriGene Technologies, Inc.

LRRC8D (NM_018103) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: LRRC8D (NM 018103) Human Tagged Lenti ORF Clone

Tag:Myc-DDKSymbol:LRRC8DSynonyms:LRRC5

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 clone is exactly the same as(RC203641).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_018103

ORF Size: 2574 bp





LRRC8D (NM_018103) Human Tagged Lenti ORF Clone - RC203641L3

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 018103.3</u>

 RefSeq Size:
 3782 bp

 RefSeq ORF:
 2577 bp

 Locus ID:
 55144

 UniProt ID:
 Q7L1W4

Cytogenetics: 1p22.2

Domains: LRR, LRR TYP, LRR BAC

Protein Families: Transmembrane

MW: 98.2 kDa

Gene Summary: Non-essential component of the volume-regulated anion channel (VRAC, also named VSOAC

channel), an anion channel required to maintain a constant cell volume in response to extracellular or intracellular osmotic changes (PubMed:24790029, PubMed:26530471, PubMed:26824658, PubMed:28193731). The VRAC channel conducts iodide better than chloride and can also conduct organic osmolytes like taurine (PubMed:24790029,

PubMed:26824658, PubMed:28193731). Plays a redundant role in the efflux of amino acids, such as aspartate, in response to osmotic stress (PubMed:28193731). Channel activity requires LRRC8A plus at least one other family member (LRRC8B, LRRC8C, LRRC8D or

LRRC8E); channel characteristics depend on the precise subunit composition

(PubMed:24782309, PubMed:24790029, PubMed:26824658, PubMed:28193731). LRRC8A and LRRC8D are required for the uptake of the drug cisplatin (PubMed:26530471). Mediates the import of the antibiotic blasticidin-S into the cell (PubMed:24782309). [UniProtKB/Swiss-Prot

Function]