OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG217464

Lrrc8d (NM_178701) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lrrc8d (NM_178701) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Lrrc8d
Synonyms:	2810473G09Rik; 4930525N13Rik; A930019F03; Lrrc5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>MG217464 representing NM_178701
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTTACCCTTGCGGAAGTTGCTTCACTTAATGACATTCAGCCAACTTACCGAATCCTGAAGCCATGGT
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TACCAAAGATCAGGTGGTCTGTTTGCCAGTGTTGCCGTCGCCTGCAAATTCAAAAGCGCACACACCACCC
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GCTGGGCCAGTGTCGGATGCTCAAGAAGAGCGGGCTTGTTGTAGAAGACCAACTGTTTGACACGCTGCCA
CTAGAAGTCAAAGAGGCATTGAATCAAGATGTCAATGTCCCCTTTGCAAACGGGATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG217464 representing NM_178701
Red=Cloning site Green=Tags(s)

MFTLAEVASLNDIQPTYRILKPWWDVFMDYLAVVMLMVAIFAGTMQLTKDQVVCLPVLPSPANSKAHTPP
GNADVTTEVPRMETATHQDQNGQTTTNDVAFGTSAVTPDIPLQATHPHAESTLPNQEVKKEKRDPTGRKT
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TKALSETACEDSEENKQRITGAQTLPKHVSTSSDEGSPSASTPMINKTGFKFSAEKPVIEVPSMTILDKK
DGEQAKALFEKVRKFRAHVEDSDLIYKLYVVQTLIKTAKFIFILCYTANFVNAISFEHVCKPKVEHLTGY
EVFECTHNMAYMLKKLLISYISIICVYGFICLYTLFWLFRIPLKEYSFEKVREESSFSDIPDVKNDFAFL
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TDLDVLKLELIPEAKIPAKISQMTNLQELHLCHCPAKVEQTAFSFLRDHLRCLHVKFTDVAEIPAWVYLL
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PSITHVKNLESLYFSNNKLESLPTAVFSLQKLRCLDVSYNNISTIPIEIGLLQNLQHLHITGNKVDILPK
QLFKCVKLRTLNLGQNCIASLPEKISQLTQLTQLELKGNCLDRLPAQLGQCRMLKKSGLVVEDQLFDTLP
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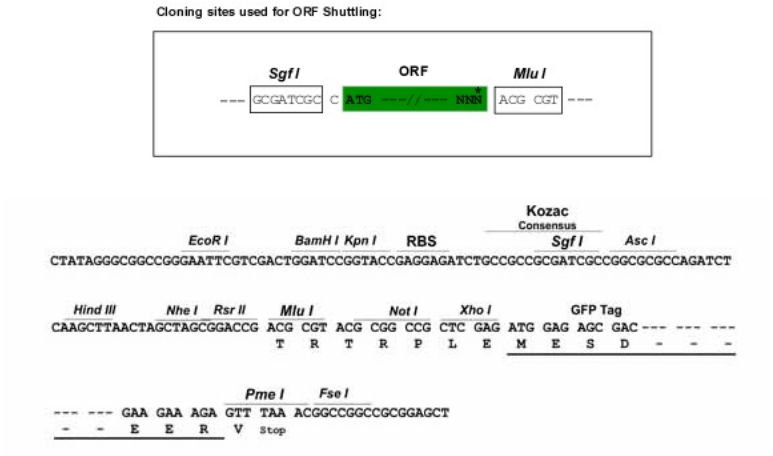
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_178701
ORF Size:	2577 bp
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: NM_178701.2

RefSeq Size: 3920 bp

RefSeq ORF: 2580 bp

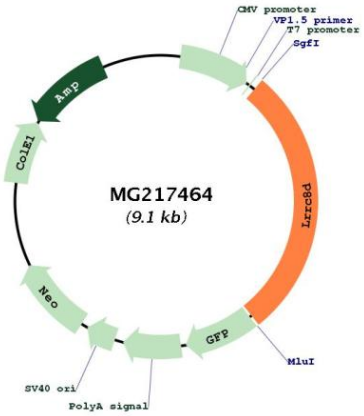
Locus ID: 231549

UniProt ID: Q8BGR2

Cytogenetics: 5 E5

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. The VRAC channel conducts iodide better than chloride and can also conduct organic osmolytes like taurine. Plays a redundant role in the efflux of amino acids, such as aspartate, in response to osmotic stress. Channel activity requires LRRC8A plus at least one other family member (LRRC8B, LRRC8C, LRRC8D or LRRC8E); channel characteristics depend on the precise subunit composition. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG217464