

Product datasheet for **SC120691**

LRRC8B (NM_015350) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LRRC8B (NM_015350) Human Untagged Clone
Tag:	Tag Free
Symbol:	LRRC8B
Synonyms:	TA-LRRP; TALRRP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC120691 sequence for NM_015350 edited (data generated by NextGen Sequencing)

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ATGATTACACTAACTGAGCTAAATGCTTAGCAGATGCCAGTCATCTTATCACATCTTA
AAACCATGGTGGGACGTCTTCTGGTATTACATCACACTGATCATGCTGCTGGTGGCCGTG
CTGGCCGAGCTCTCCAGCTGACGCAGAGCAGGGTTCTGTGCTGTCTCCATGCAAAGTG
GAATTTGACAATCACTGTGCCGTGCCTTGGGACATCCTGAAAGCCAGCATGAACACATCC
TCTAATCCTGGGACACCGCTTCCGCTCCCTCCGAATTCAGAATGACCTCCACCGACAG
CAGTACTCCTATATTGATGCCGTCTGTTACGAGAAACAGCTCCATTGGTTTGCAAAGTTT
TCCCCCTATCTGGTGCTCTTGCACACGCTCATCTTGCAGCCTGCAGCAACTTTTGGCTT
CACTACCCAGTACCAGTTCAGGCTCGAGCATTTTGTGGCCATCCTTCACAAGTGCTTC
GATTCTCCATGGACCACCCGCGCCCTTTCAGAAACAGTGGCTGAGCAGTCAGTGAGGCT
CTGAAACTCTCCAAGTCCAAGATTTTGTCTTCTGCTCCTCAGGGTGTTCAGCTGACATAGAT
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CCAACCTCCAGTGTCTGGACAAGAAGGAGGGTGAACAGGCCAAAGCCATCTTTGAAAAA
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CAGATAATAGTCAAAGTCATTTTGTGTGCTCATCAACTTATGTTCCATATTTTTTA
ACCCACATCACTCTTGAAATCGACTGTTCAAGTTGATGTGCAGGCTTTTACAGGATATAAG
CGCTACCAAGTGTGTCTATTCTTGGCAGAAATCTTTAAGGTCTGGCTTCATTTTATGTC
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CTCAATAATGAATGGACAGTTGAGAAACTGAAAAGTAAGCTTGTGAAAAATGCCAGGAC
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AAAAGTGTGGAAGAGATCATTAGCTTTCAGCATCTTCAGAATCTTCTGCTTAAAGTTG
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TCCCCTCATGTGGTGAGCTGTCAAACCTTACTCATCTGGAGCTCATTGGTAATTACCTG
GAAACACTTCTCCTGAACTAGAAGGATGTCAAGTCCCTAAAACGGAAGTCTGATTGTT
GAGGAGAACTTGCTCAATACTCTCCTCTCCCTGTAACAGAACGTTTACAGACGTGCTTA
GACAAATGTTGA

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Clone variation with respect to NM_015350.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_015350 unedited
 NGGGAGTTCACTTTTGTATACGACTCATATAGGCGGCCGCGNAATTTCGCACGAGGCGGGG
 CTGGAGTCGCGCAGGTAATAGTTAACCTCTTCTGTGAGAAGTCAGAAGGTGATCTCTTTA
 ATGCTTTCTTTTTAAGAATTTTTCAAATTGAGACTAATTGCAGAGGTTCCAGTTGACCAG
 CATTTCATAGGAATGAAGACAAACACAGAGATGGTGTGTCTAAGAACTTCAAAAGGTGTA
 GACCTCCTGACTGAAGCATATTGGATTTATTTAATTTTTTCTACTGTATTTCTGTCCTCC
 TACAAGGGAAGTCATGATTACACTAAGTGAAGTAAATGCTTAGCAGATGCCAGTCAT
 CTTATCACATCTTAAACCATGGTGGGACGCTCTTCTGGTATTACATCACACTGATCATGC
 TGCTGGTGGCCGTGCTGGCCGAGCTCTCCAGCTGACGCAGAGCAGGGTTCTGTGCTGTC
 TTCCATGCAAAGTGGAATTTGACAATCACTGTGCCGTGCCTTGGGACATCCTGAAAGCCA
 GCATGAACACATCCTCTAATCCTGGGACACCGCTTCCGCTCCCCCTCCGAATTCAGAATG
 ACCTCCACCGACAGCAGTACTCCTATATTGATGCCGTCTGTTACGAGAAACAGCTCCATT
 GGTGTGCAAAGTTTTTCCCTATCTGGTGTCTTGCACACGCTCATCTTTCAGCCTGCA
 GCAACTTTTGGCTTCACTACCCAGTACCAGTTCCAGGCTCGAGCATTNTGTGGCCATTC
 TTCACAAGTGCTTCGATTCTTCATGGACCACCGCGCCCTTTCAGAAACAGTGGCTGAGC
 AGTCAGTGAGGCCTCTGAAACTCTNCAGTCCAAGATTTGCTTTCTGCTTCAGC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_015350 unedited
 CTANGATCGATTTTTTTTTTTTTTTTTTGTGAGAAAGAGTCTTGCTCTGTACCCAGGCTGG
 TGTACAGTGGCACAATCTTGGCTCACTGCAACCTCCACCTCCCTGGTTCAAGCAATTCCC
 CTGCGTCAGCCTCCCAAGTAGCTGGGATTACAGGCGCACGCCACCACGCTGGCTAATTT
 TTTTGTAGTTTTAGCAGAGATGGGGTTTACCAGGTTGGCCAGACTGGTCTCGAACTCCT
 GACCTCAAGCAATCCGCCCATCTTGGCCTCCCAAAGTGCTGGGATTATAGGCATGAGCCA
 CCACGCCCGGCCGAGCATACTTTTAAAAATGATTTTGAACACGGGTCTTTTTCTTTAA
 GTCAACATTTGTCTAAGCACGTCTGTAAACGTTCTGTTACAGGGAGAGGAAGAGTATTGA
 GCAAGTTCTCCTCAACAATCAGACAGTTCGTTTTAGGGACTGACATCCTTCTAGTTTCAG
 GAGGAAGTGTTCAGGTAATTACCAATGAGCTCCAGATGAGTAAGGTTTGACAGCTCAC
 CCACATGAGGGGACAAATTCATCAAGCTATTTTTCCCCAAAAGTAAACACTGCAGCTTTT
 TGCACTGAAACAGCCCATCTGGTAGCATCTCAATATTGTTGTTGGTAACAGCAAAGTACT
 GCAAATTACTCAGATACTGGATTTCTTCTGGAATGAAAGTCAAGTGGTTATAGCTTAAAT
 CCAAATAATGTAGTTTAGTGCATAGGAAAAGCTGCAAGGCGAGATTCTCAATATATTATG
 GTCCAAAAAGAGCTGCTCTAGTTTAGATAAAGCCCCCAATCTGTGCAGATATATAACCA
 ATGGTATTGTGCCACAAA

Restriction Sites:

NotI-NotI

ACCN:

NM_015350

Insert Size:

3000 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_015350.1](#), [NP_056165.1](#)

RefSeq Size: 3588 bp

RefSeq ORF: 2412 bp

Locus ID: 23507

UniProt ID: [Q6P9F7](#)

Cytogenetics: 1p22.2

Domains: LRR

Protein Families: Transmembrane

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:26824658, PubMed:28193731). The VRAC channel conducts iodide better than chloride and can also conduct organic osmolytes like taurine. 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:24790029, PubMed:26824658, PubMed:28193731).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript. Variants 1 and 2 both encode the same protein. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.