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Product datasheet for SC128009

LAR (PTPRF) (NM_130440) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LAR (PTPRF) (NM_130440) Human Untagged Clone
Tag:	Tag Free
Symbol:	LAR
Synonyms:	BNAH2; LAR
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC128009 sequence for NM_130440 edited (data generated by NextGen Sequencing)

ATGGCCCCTGAGCCAGCCCCAGGGAGGACGATGGTGCCCCTTGTGCCTGCACTGGTGATG
CTTGGTTTGGTGGCAGGCGCCCATGGTGACAGCAAACCTGTCTTCATTAAAGTCCCTGAG
GACCAGACTGGGCTGTCAGGAGGGGTAGCCTCCTTCGTGTGCCAAGCTACAGGAGAACCC
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CCCTACGTGAAGTGGATGATGGGGGCCGAGGAGCTCACCAAGGAGGATGAGATGCCAGTT
GGCCGCAACGTCCTGGAGCTCAGCAATGTCGTACGCTCTGCCAACTACACCTGTGTGGCC
ATCTCCTCGCTGGGCATGATCGAGGCCACAGCCCAGGTCACAGTGAAAGCTCTTCCAAAG
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GGCCCCTTTCAGGAGGTGGATGGTGTGGCCACCACCCGCTACAGCATTGGCGGCCTCAGC
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AGCGAGGCAGTGCGGGCACGCACGGGAGAACAGGCGCCCTCCAGCCCACCGCGCCGCGTG
CAGGCACGCATGCTGAGCGCCAGCACCATGCTGGTGCAGTGGGAGCCTCCCGAGGAGCCC
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GCCTGGCACAAGCACAACACCGACGCGGGGCTCCTCACGACCGTGGGCAGCCTGCTGCCT
GGCATCACCTACAGCCTGCGCGTGCTTGCCTTCACCGCCGTGGGCGATGGCCCTCCCAGC

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CCCACCATCCAGGTCAAGACGCAGCAGGGAGTGCCTGCCCAGCCCGCGGACTTCCAGGCC
GAGGTGGAGTCGGACACCAGGATCCAGCTCTCGTGGCTGCTGCCCCCTCAGGAGCGGATC
ATCATGTATGAACTGGTGTACTGGGCGGCAGAGGACGAAGACCAACAGCACAAGGTGACC
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ACCATGGGTGATTTCTGGAGGATGGTGTGGGAACAGCGCACGGCCACTGTGGTCATGATG
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GAGACCTGTGGCCTTATTCAGGTGACCCTGTTGGACACAGTGGAGCTGGCCACATACACT
GTGCGCACCTTCGCACTCCACAAGAGTGGCTCCAGTGAGAAGCGCGAGCTGCGTCAGTTT
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CTACGACGGGTCAAGGCCTGCAACCCCCTAGACGCAGGGCCCATGGTGGTGCACTGCAGC

GCGGGCGTGGGCCGCACCGGCTGCTTCATCGTGATTGATGCCATGTTGGAGCGGATGAAG
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CACAATTCCACCATCATCGTCATGCTGACCAAGCTTCGGGAGATGGGCAGGGAGAAATGC
CACCAGTACTGGCCAGCAGAGCGCTCTGCTCGCTACCAGTACTTTGTTGTTGACCCGATG
GCTGAGTACAACATGCCCCAGTATATCCTGCGTGAGTTCAAGGTCACGGATGCCCGGGAT
GGGCAGTCAAGGACAATCCGGCAGTTCCAGTTCACAGACTGGCCAGAGCAGGGCGTGCCC
AAGACAGGCGAGGGATTCATTGACTTCATCGGGCAGGTGCATAAGACCAAGGAGCAGTTT
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ATCACTCTGAGCATCGTCCTGGAGCGCATGCGCTACGAGGGCGTGGTCGACATGTTTCAG
ACCGTGAAGACCCTGCGTACACAGCGTCCTGCCATGGTGCAGACAGAGGACCAGTATCAG
CTGTGCTACCGTGCGGCCCTGGAGTACCTCGGCAGCTTTGACCACTATGCAACGTAA

Clone variation with respect to NM_130440.2
4235 t=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_130440 unedited
GATCTGGTACCGGTCCGGAATTCCCGGGATATCGTCGACCCACGCGTCCGGCGGTGGCGG
CGGCAGAGGCGGCGGCTCCAGCTTCGGCTCCGGCTCGGGCTCGGGCTCCGGCTCCGGCTC
CGGCTCCGGCTCCAGCTCGGGTGGCGGTGGCGGGAGCGGGACCAGGTGGAGGCGGCGGCG
GCAGAGGAGTGGGAGCAGCGGCCCTAGCGGCTTGCGGGGGGACATGCGGACCGACGGCCC
CTGGATAGGCGGAAGGAGTGGAGGCCCTGGTGCCCGGCCCTTGGTGCTGAGTATCCAGCA
AGAGTGACCGGGGTGAAGAAGCAAAGACTCGGTTGATTGTCCTGGGCTGTGGCTGGCTGT
GGAGCTAGAGCCCTGGATGGCCCCTGAGCCAGCCCCAGGGAGGACGATGGTGCCCCTTGT
GCCTGCACTGGTGATGCTTGGTTTGGTGGCAGGCGCCCATGGTGACAGCAAACCTGTCTT
CATTAAAGTCCCTGAGGACCAGACTGGGCTGTCAGGAGGGGTAGCCTCCTTCGTGTGCCA
AGCTACAGGAGAACCCAAGCCGCGCATCACATGGATGAAGAAGGGGAAGAAAGTCAGCTC
CCAGCGCTTCGAGGTCATTGAGTTTGATGATGGGGCAGGGTCAGTGCTTCGGATCCAGCC
ATTGCGGGTGCAGCGAGATGAAGCCATCTATGAGTGTACAGCTACTAACAGCCTGNGTGA
GATCAACACTAGTGCCAAGCTCTCAGTGCTCGAAGAGAACAGCTGCCCCCTGGGTTCCCT
TCCATCGACAT

Restriction Sites: Please inquire

ACCN: NM_130440

Insert Size: 7700 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_130440.1, NP_569707.1

RefSeq Size: 7691 bp

RefSeq ORF: 5667 bp

Locus ID: 5792

UniProt ID: P10586

Cytogenetics: 1p34.2

Domains: Y_phosphatase, ig, PTPc_motif, IGc2, IG, FN3

Protein Families: Druggable Genome, Phosphatase, Transmembrane

Protein Pathways: Adherens junction, Cell adhesion molecules (CAMs), Insulin signaling pathway

Gene Summary: The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region, a single transmembrane region, and two tandem intracytoplasmic catalytic domains, and thus represents a receptor-type PTP. The extracellular region contains three Ig-like domains, and nine non-Ig like domains similar to that of neural-cell adhesion molecule. This PTP was shown to function in the regulation of epithelial cell-cell contacts at adherents junctions, as well as in the control of beta-catenin signaling. An increased expression level of this protein was found in the insulin-responsive tissue of obese, insulin-resistant individuals, and may contribute to the pathogenesis of insulin resistance. Two alternatively spliced transcript variants of this gene, which encode distinct proteins, have been reported. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region compared to variant 1. The encoded isoform (2) is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.