

Product datasheet for **RC226181**

LRRC8A (NM_001127245) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LRRC8A (NM_001127245) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LRRC8A
Synonyms:	AGM5; HsLRRC8A; LRRC8; SWELL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC226181 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATTCCGGTGACAGAGCTCCGCTACTTTGCGGACACGCAGCCAGCATACCGGATCCTGAAGCCGTGGT
 GGGATGTGTTACAGACTACATCTCTATCGTCATGCTGATGATTGCCGCTTCGCGGGGACGCTGCAGGT
 CACCCAAGACAAGATGATCTGCCTGCCTTGTAAAGTGGGTACCAAGGACTCCTGCAATGATTCTGTTCCGG
 GGCTGGGACAGCCCTGGCCCGGAGCCACCTACCCAACTCCACCATTCTGCCGACCCCTGACACGGGCC
 CCACAGGCATCAAGTATGACCTGGACCGGACAGTACAACACTACGTGGACGCTGTGTGCTATGAGAACCG
 ACTGCACTGGTTTCCAAGTACTTCCCCTACCTGGTGCTTCTGCACACGCTCATCTTCTGGCCTGCAGC
 AACTTCTGGTTCAAATTCGCGCACAGCTCGAAGCTGGAGCACTTTGTGTCTATCCTGCTGAAGTGCT
 TCGACTCGCCCTGGACCAGGAGGCCCTGTCGGAGACAGTGGTGGAGGAGAGCGACCCCAAGCCGGCCTT
 CAGCAAGATGAATGGGTCCATGGACAAAAGTCAATCGACCGTCAGTGAGGACGTGGAGGCCACCGTGCC
 ATGCTGCAGCGGACCAAGTACCGGATCGAGCAGGGTATCGTGGACCGCTCAGAGACGGGCGTGCTGGACA
 AGAAGGAGGGGAGCAAGCCAAGGCGCTGTTTGAAGGTTGAAGAAGTCCGGACCCATGTGGAGGAGGG
 GGACATTTGTACCGCCTCTACATGCGGCAGACCATCATCAAGGTGATCAAGTTCATCCTCATCATCTGC
 TACACCGTCTACTACGTGCACAACATCAAGTTCGACGTGGACTGCACCGTGGACATTGAGAGCCTGACGG
 GCTACCGCACCTACCGCTGTGCCACCCCTGGCCACACTCTTCAAGATCCTGGCGTCTTCTACATCAG
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 TACTCGTTTGAGTCGATCCGTGAGGAGAGCAGCTACAGCGACATCCCGACGTCAAGAACGACTTCGCT
 TCATGCTGCACCTCATTGACCAATACGACCCGCTCTACTCCAAGCGCTTCGCCGCTTCTGTCGGAGGT
 GAGTGAGAACAAGCTGCGGCAGCTGAACCTCAACAACGAGTGGACGCTGGACAAGCTCCGGCAGCGGCTC
 ACCAAGAACGCGCAGGACAAGCTGGAGCTGCACCTGTTTATGCTCAGTGGCATCCCTGACACTGTGTTTG
 ACCTGGTGGAGCTGGAGGCTCCTCAAGCTGGAGCTGATCCCGACGTGACCATCCCGCCAGCATTGCCCA
 GCTCACGGGCTCAAGGAGCTGTGGCTCTACCACACAGCGCCAAAGATTGAAGCGCCCGCTGGCCTTC
 CTGCGGAGAACCTGCGGGCGTGCACATCAAGTTCACCGACATCAAGGAGATCCCGCTGTGGATCTATA
 GCCTGAAGACTGGAGGAGCTGCACCTGACGGGCAACCTGAGCGCGGAGAACACCGCTACATCGTCAT
 CGACGGGCTGCGGAGCTCAAACGCCTCAAGGTGCTGCGGCTCAAGAGCAACCTAAGCAAGCTGCCACAG
 GTGGTACAGATGTGGGCTGCACCTGCAGAAGCTGTCCATCAACAATGAGGGCACCAAGCTCATCGTCC
 TCAACAGCCTCAAGAAGATGGCGAACCTGACTGAGCTGGAGCTGATCCGCTGTGACTGGAGCGCATCCC
 CCACTCCATCTTCAAGCTCCACAACCTGCAGGAGATTGACCTCAAGGACAACAACCTCAAGACCATCGAG
 GAGATCATCAGCTTCCAGCACCTGCACCGCCTCACCTGCCTTAAGCTGTGGTACAACCACATCGCCTACA
 TCCCCATCCAGATCGGCAACCTCAACAACCTGGAGCGCCTCTACCTGAACCGCAACAAGATCGAGAAGAT
 CCCCACCCAGCTCTTCTACTGCCGAAGCTGCGCTACCTGGACCTCAGCCACAACAACCTGACCTTCCTC
 CCTGCCGACATCGGCCTCCTGCAGAACCTCCAGAACCTAGCCATCACGGCCAACCGGATCGAGACGCTCC
 CTCCGGAGCTCTTCCAGTCCGGAAGCTGCGGGCCCTGCACCTGGGCAACAACGCTGCTGCAGTCACTGCC
 CTCCAGGGTGGGCGAGCTGACCAACCTGACGCAGATCGAGCTGCGGGGCAACCGGCTGGAGTGCCTGCCT
 GTGGAGCTGGGCGAGTGCCCACTGCTCAAGCGCAGCGGCTTGGTGGTGGAGGAGGACCTGTTCAACACAC
 TGCCACCCGAGGTGAAGGAGCGGCTGTGGAGGGCTGACAAGGAGCAGGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226181 protein sequence
Red=Cloning site Green=Tags(s)

MIPVTELRYFADTQPAYRILKPWWVFTDYISIVMLMIAVFGGTLQVTQDKMICLPCKWVTKDSCNDSFR
GWAAPGPEPTYPNSTILPTDGTGPTGIKYDLDRHQYNYVDAVCYENRLHWFACYFPYLVLHLLIFLACS
NFWFKFPRTSSKLEHFVSILLKCFDSPWTRALSETVVEESDPKPAFSKMNGSMDKKSSTVSEDVEATVP
MLQRTKSRIEQIVDRSETGVLDKKEGEQAKALFEKVKKFRTHVEEGDIVYRLYMRQTIKVIKIFILIIIC
YTVYYVHNIKFDVDCTVDIESLTGYRTRYCAHPLATLFKILASFYISLVIFYGLICMYTLWMLRRSLKK
YSFESIREESSYSDIPDVKNDFAFMLHLIDQYDPLYSKRFAVFLSEVSENKLRQLNLNNEWTLDKLRQRL
TKNAQDKLELHFLMMSGIPDVFDFLVELEVLELIPDVTIPPSIAQLTGLKELWLYHTAAKIEAPALAF
LRENLRALHIKFTDIKEIPLWIYSLKLEELHLTGNSAENNRIVIDGLRELKRLKVLRLKSNLSKLPQ
VVTDVGVHLQKLSINNEGKLIIVLNSLKKMANLTELELIRCDLERIPHSIFSLHNLQEIDLKDNNLKTIE
EIIISFQHLHRLTCLKLWYNHIAYIPIQIGNLTNLERLYLNRNKIEKIPTQLFYCRKLRYLDSLHNNLTFL
PADIGLLQNLQNLAITANRIETLPPQLFQCRKLRALHLGNNVLSLPSRVGELTNLTQIELRGNRLECLP
VELGECPLLKRSGLVVEEDLFNTLPPEVKERLWRADKEQA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6689_d06.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001127245

ORF Size: 2430 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_001127245.1](#), [NP_001120717.1](#)

RefSeq Size: 4261 bp

RefSeq ORF: 2433 bp

Locus ID: 56262

UniProt ID: [Q8IWT6](#)

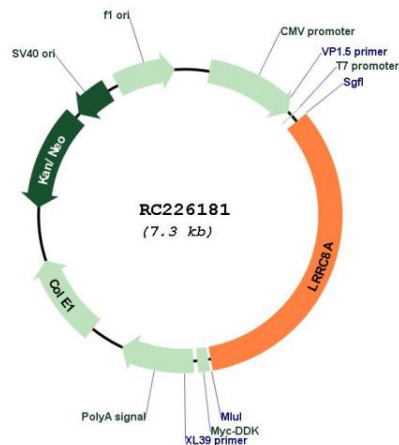
Cytogenetics: 9q34.11

Protein Families: Transmembrane

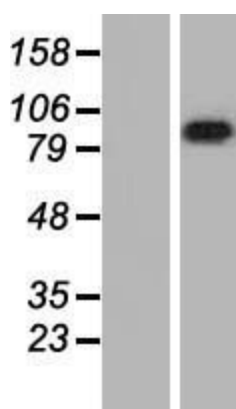
MW: 94.2 kDa

Gene Summary: This gene encodes a protein belonging to the leucine-rich repeat family of proteins, which are involved in diverse biological processes, including cell adhesion, cellular trafficking, and hormone-receptor interactions. This family member is a putative four-pass transmembrane protein that plays a role in B cell development. Defects in this gene cause autosomal dominant non-Bruton type agammaglobulinemia, an immunodeficiency disease resulting from defects in B cell maturation. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008]

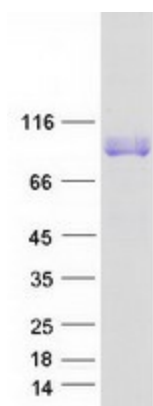
Product images:



Circular map for RC226181



Western blot validation of overexpression lysate (Cat# [LY426738]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226181 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LRRC8A protein (Cat# [TP326181]). The protein was produced from HEK293T cells transfected with LRRC8A cDNA clone (Cat# RC226181) using MegaTran 2.0 (Cat# [TT210002]).