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Product datasheet for RC205452

LRRC50 (DNAAF1) (NM_178452) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LRRC50 (DNAAF1) (NM_178452) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LRRC50
Synonyms:	CILD13; DAU1; LRRC50; ODA7; swt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205452 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCACCCTGAGCCCTCGGAGCCTGCGACAGGTGGTGCAGCAGAGCTGGATTGCGCGCAGGAGCCCGGCG
TGGAGGAGTCTGCGGGTGACCACGGGAGCGCAGGCCGAGGGGGCTGCAAGGAAGAAATTAATGATCCTAA
GGAAATATGTGTGGGTTCTTCTGACACATCCTACCACAGCCAGCAGAAACAGAGTGGTGATAATGGGTCA
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CATTGAAAACCTCTCCTGCCTCCCAGTCCTGAACACATTGCAGATGGCCCACAATCACCTGGAGACCGTG
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ACCCGGAGATCCTGAGCATTCTGGAAAGCATGCCCGATTTGCGTGTACTGAATTTGATGGGAAACCCGGT
TATCAGACAGATTCCTAATTACAGAAGGACAGTCACTGTACGACTAAAGCACTTAACATACCTGGATGAT
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AGATGGAGCTATTTGTTAAGGAAAGCTTTGAGGCCAAGGACGAGCTCTGCCCGGAAAGGCCAAGTGGAGA
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AGGCTGTGGCCACTGAGGGTGTATTCGTTACAGAACTTGATGGAACGAGAACGGAAGATTTAGAAACCAT
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AGGGACTCGGAAATCCGAAAACAAGACACCAAGTCCCCAAGACCCCTGATCCAGGAGCTCAGCGACGAGG
ACCCCTCTGGCCAGCCACTGATGCCCCCCACCTGCCAAAGAGATGCTGCACCACTCACTTCCACTGGAGA
CAGGGACAGCGACTTCCTTGCAGCCTCTTCTCCGGTGCCGACTGAGAGCGCCGCCACACCCCCAGAGACG
TGTGTCGGAGTTGCCCAGCCCAGCCAAGCTCTGCCCACGTGGGACCTCACTGCATTCCCAGCACCGAAAG
CATCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205452 protein sequence
Red=Cloning site Green=Tags(s)

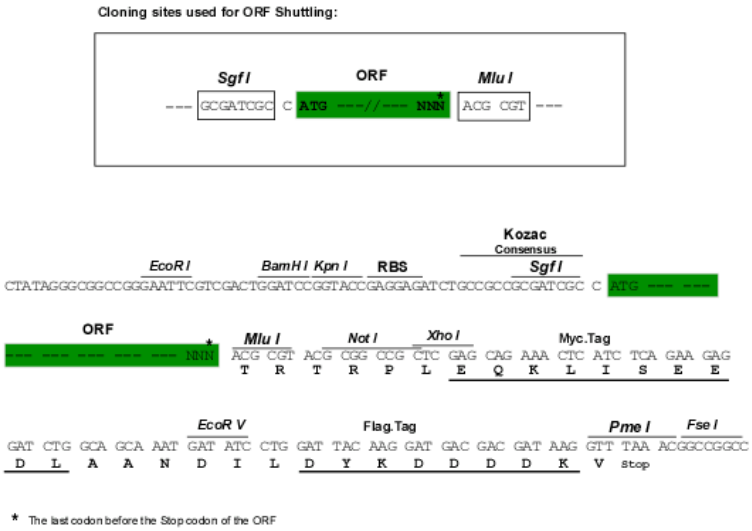
MHPEPSEPATGGAAELDCAQEPGVEESAGDHGSAGRGGCKEEINDPKEICVGSSDTSYHSQQKQSGDNGS
GGHFAHPREDREDRGPRMTKSSLQKLCKQHKLYITPALNDTLYLHFKGFDRIENLEEYTGLRCLWLQSNG
IQKIENLEAQTELRCLFLQMNLLRKIENLEPLQKLDALNLSNNYIKTIENLSCLPVLNTLQMAHNHLETV
EDIQHLQECLRLCVLDLSHNKLSDPEILSILESMPDLRVLNLMGNPVIRQIPNYRRTVTVRLKHLTYLDD
RPVFPKDRACAEAWARGGYAAEKEERQQWESRERKKITDSIEALAMIKQRAEERKRQRESQERGEMTSSD
DGENVPASAEGKEEPPGDRETRQKMELFVKESFEAKDELCPERPSGEEPPVEAKREDGGPEPEGTLPAET
LLLSSPVEVKGEDGDGEPEGTLPAEAPPPPPPVEVKGEDGDQEPEGTLPAETLLLSPPVKVKGEDGDREP
EGTLPAEAPPPLPLGAAREEPTPQAVATEGVFVTELDGTRTEDLETIRLETKETCCIDDLPDLEDDDETG
KSLEDQNMCFPKIEVISSLSDDSDPELDYTSLPVLENLPTDTLSNIFAVSKDTSKAARVPFTDIFKKEAK
RDSEIRKQDTKSPRPLIQELSDEDPSGQPLMPPTCQRDAAPLTSTGDRDSDFLAASSPVPTESAATPPET
CVGVAQPSQALPTWDLTAFPAPKAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6313_f12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178452

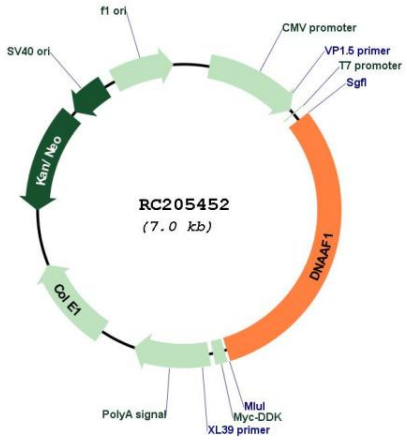
ORF Size: 2175 bp

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

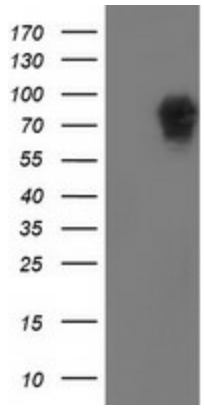
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_178452.3, NP_848547.3
RefSeq Size:	2451 bp
RefSeq ORF:	2178 bp
Locus ID:	123872
UniProt ID:	Q8NEP3
Cytogenetics:	16q24.1
MW:	80 kDa
Gene Summary:	The protein encoded by this gene is cilium-specific and is required for the stability of the ciliary architecture. It is involved in the regulation of microtubule-based cilia and actin-based brush border microvilli. Mutations in this gene are associated with primary ciliary dyskinesia-13. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

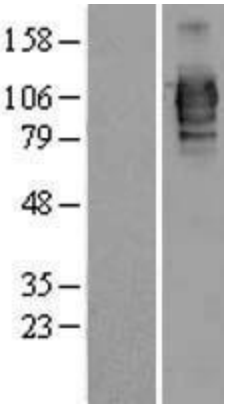
Product images:



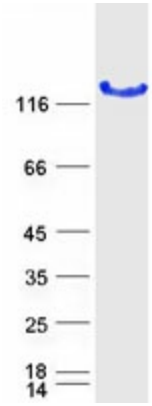
Circular map for RC205452



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LRRC50 (Cat# RC205452, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LRRC50(Cat# [TA504546]). Positive lysates [LY405926] (100ug) and [LC405926] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY405926]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205452 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DNAAF1 protein (Cat# [TP305452]). The protein was produced from HEK293T cells transfected with DNAAF1 cDNA clone (Cat# RC205452) using MegaTran 2.0 (Cat# [TT210002]).