

Product datasheet for RC211198

DOCK2 (NM_004946) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: DOCK2 (NM_004946) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: DOCK2
Synonyms: IMD40
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC211198 representing NM_004946
Red=Cloning site Blue=ORF Green=Tags(s)

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GGTCATCTCTGGAATCTAAAGATAAAGGAGAAAAGAAGCTTTGCCATGTCCTATGTGAAGCTGATGAAAGA
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Protein Sequence:

>RC211198 representing NM_004946
 Red=Cloning site Green=Tags(s)

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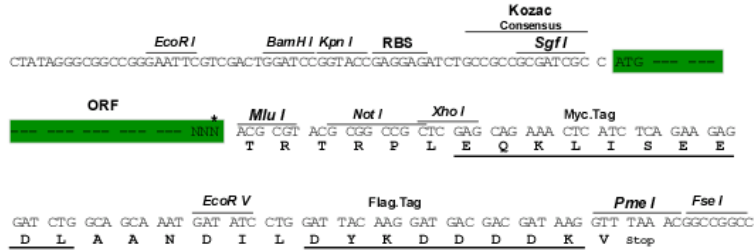
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Restriction Sites:

SgfI-MluI

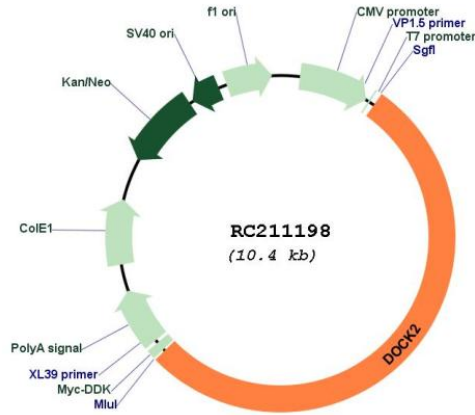
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

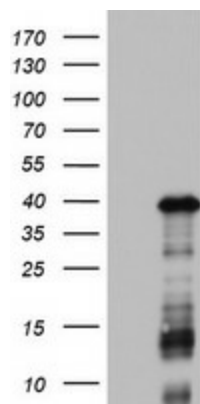
Plasmid Map:



ACCN: NM_004946

ORF Size: 5490 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:	<ol style="list-style-type: none">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_004946.3
RefSeq Size:	6050 bp
RefSeq ORF:	5493 bp
Locus ID:	1794
UniProt ID:	Q92608
Cytogenetics:	5q35.1
Protein Families:	Druggable Genome
Protein Pathways:	Chemokine signaling pathway, Fc gamma R-mediated phagocytosis
MW:	211.8 kDa
Gene Summary:	The protein encoded by this gene belongs to the CDM protein family. It is specifically expressed in hematopoietic cells and is predominantly expressed in peripheral blood leukocytes. The protein is involved in remodeling of the actin cytoskeleton required for lymphocyte migration in response to chemokine signaling. It activates members of the Rho family of GTPases, for example RAC1 and RAC2, by acting as a guanine nucleotide exchange factor (GEF) to exchange bound GDP for free GTP. Mutations in this gene result in immunodeficiency 40 (IMD40), a combined form of immunodeficiency that affects T cell number and function, also with variable defects in B cell and NK cell function. [provided by RefSeq, May 2018]

Product images:

HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DOCK2 (Cat# RC211198, 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-DOCK2 (Cat# [TA802698]).