

Product datasheet for RC229530

OriGene Technologies, Inc.

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DAP12 (TYROBP) (NM_001173514) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: DAP12 (TYROBP) (NM 001173514) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: TYROBP

Synonyms: DAP12; KARAP; PLOSL; PLOSL1

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC229530 representing NM_001173514
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGGGGACTTGAACCCTGCAGCAGGCTCCTGCTCCTGCTCTCTGCTGCTGTAAGTGATTGCAGTT GCTCTACGGTGAGCCCGGGCGTGCTGGCAGGGATCGTGATGGGAGACCTGGTGCTGACAGTGCTCATTGC CCTGGCCGTGTACTTCCTGGGCCGGCTGGTCCCTCGGGGGGCGAGGGGCTGCGGAGGCAGCCGGAAA CAGCGTATCACTGAGACCGAGTCGCCTTATCAGGAGCTCCAGGGTCAGAGGTCGGATGTCTACAGCGACC

TCAACACAGAGGCCGTATTACAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229530 representing NM_001173514

Red=Cloning site Green=Tags(s)

MGGLEPCSRLLLLPLLLAVSDCSCSTVSPGVLAGIVMGDLVLTVLIALAVYFLGRLVPRGRGAAEAATRK

QRITETESPYQELQGQRSDVYSDLNTQRPYYK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

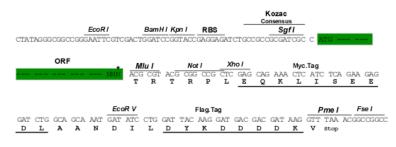
Restriction Sites: Sgfl-Mlul





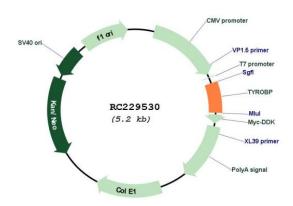
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001173514

ORF Size: 306 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



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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: <u>NM 001173514.2</u>

 RefSeq ORF:
 309 bp

 Locus ID:
 7305

 UniProt ID:
 043914

 Cytogenetics:
 19q13.12

Protein Families: Druggable Genome, Transmembrane

MW: 11.5 kDa

Protein Pathways:

Gene Summary: This gene encodes a transmembrane signaling polypeptide which contains an

Natural killer cell mediated cytotoxicity

immunoreceptor tyrosine-based activation motif (ITAM) in its cytoplasmic domain. The encoded protein may associate with the killer-cell inhibitory receptor (KIR) family of membrane glycoproteins and may act as an activating signal transduction element. This protein may bind zeta-chain (TCR) associated protein kinase 70kDa (ZAP-70) and spleen tyrosine kinase (SYK) and play a role in signal transduction, bone modeling, brain myelination,

and inflammation. Mutations within this gene have been associated with polycystic

lipomembranous osteodysplasia with sclerosing leukoencephalopathy (PLOSL), also known as Nasu-Hakola disease. Its putative receptor, triggering receptor expressed on myeloid cells 2 (TREM2), also causes PLOSL. Multiple alternative transcript variants encoding distinct isoforms

have been identified for this gene. [provided by RefSeq, Mar 2010]