

## Product datasheet for **RC203771**

### DAP12 (TYROBP) (NM\_198125) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** DAP12 (TYROBP) (NM\_198125) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** DAP12  
**Synonyms:** DAP12; KARAP; PLOSL; PLOSL1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC203771 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGGGACTTGAACCCGCAGCAGGCTCCTGCTCCTGCCTCTCCTGCTGGCTGTAAGTGGTCTCCGTC  
 CTGTCCAGGCCAGGCCAGAGCGATTGCAGTTGCTCTACGGTGAGCCCGGGCTGCTGGCAGGGATCGT  
 GATGGGAGACCTGGTGTGACAGTGCTCATTGCCCTGGCCGTGTACTTCTGGCCGGCTGGTCCCTCGG  
 GGGCGAGGGGCTGCGGAGGCGACCCGAAACAGCGTATCACTGAGACCGAGTCGCCTTATCAGGAGCTCC  
 AGGGTCAGAGGTCGGATGTCTACAGCGACCTCAACACACAGAGGCCGATTACAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203771 protein sequence  
 Red=Cloning site Green=Tags(s)  
 MGGLEPCSRLLLLLPLLLAVSGLRPVQAQAQSDSCSTVSPGVLAGIVMGDLVLTVLIALAVYFLGRLLVPR  
 GRGAAEATRKQRI TETESPYQELQQRSDVYSDLNTQRPYYK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6008\\_f10.zip](https://cdn.origene.com/chromatograms/mk6008_f10.zip)

**Restriction Sites:** SgfI-MluI



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Cloning Scheme:



ACCN: NM\_198125

ORF Size: 336 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_198125.3](#)

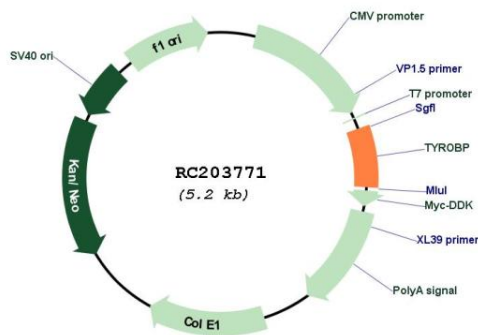
RefSeq Size: 572 bp

RefSeq ORF: 339 bp

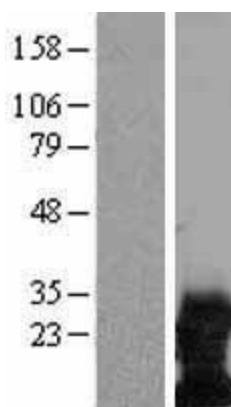
**Locus ID:** 7305  
**UniProt ID:** [O43914](#)  
**Cytogenetics:** 19q13.12  
**Protein Families:** Druggable Genome, Transmembrane  
**Protein Pathways:** Natural killer cell mediated cytotoxicity  
**MW:** 12.1 kDa

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

### Product images:



Circular map for RC203771



Western blot validation of overexpression lysate (Cat# [LY403671]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203771 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).