

Product datasheet for **RC207471**

FNDC4 (NM_022823) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: FNDC4 (NM_022823) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: FNDC4
Synonyms: FRCP1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC207471 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCAAGCGGATGCCACAGTCCCCCCCCAGCGGACTCCGTGGGGACATGGCTTCGCTGGTCCCTTT
CCCCATATCTAAGCCCCACGGTCTCCTGCTGGTCAGCTGTGACCTGGGCTTCGTGCGAGCAGACCGGCC
TCCCTCTCCTGTGAATGTGACGGTCACTCACCTCAGAGCCAACCTCGCCACTGTGCTCTGGGACGTCCA
GAAGGCAACATCGTCATTGGCTACTCCATTTCCAGCAACGGCAGAATGGCCCCGGGCAGCGTGTGATTC
GGGAGGTGAACACCACCACCCGGCCTGTGCCCTCTGGGGCTGGCTGAAGACAGTGACTACACAGTGCA
GGTCAGGAGCATCGGCCTTCGGGGAGAGAGTCCCCAGGGCCCCGGGTGCACTTCCGAACCTCAAGGGT
TCTGACCGGCTACCTTCAACAGTTCAAGCCCAGGTGACATCACAGTGAAGGCTCGATGGAGAGCGGC
CACTGCAGACTGGGGAAGTGGTCATCATTGTGGTGGTGTGCTCATGTGGGCTGCTGTAATTGGGCTGTT
CTGCCGTAGTATGACATCATCAAGGACAATGACTCCAACAACAATCCAAGGAGAAGGGAAAGGGGCCG
GAACAGAGTCCTCAGGGAAGGCCAGTGGGGACAAGACAGAAAAAGTCACCATCTATCAACACCATCGACG
TT

ACGGTACGGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online >](#)

Protein Sequence: >RC207471 protein sequence
 Red=Cloning site Green=Tags(s)

MPSGCHSSPPSGLRGMASLVPLSPYLSPVLLLVSCDLGFVRADRPSPVNVTVTHLRANSATVSWDVP
 EGNIVIGYSISQQRQNGPQQRVIREVNTTTRACALWGLAEDSDYTVQVRSIGLRGESPPGPRVHFRTLKG
 SDRLPNSSSSPGDITVEGLDGERPLQTGEVVIIVVVLLMWAIVGLFCRQYDIKDNDSNNPKEKGGKGP
 EQSPQGRPVGTRQKKSPSINTIDV

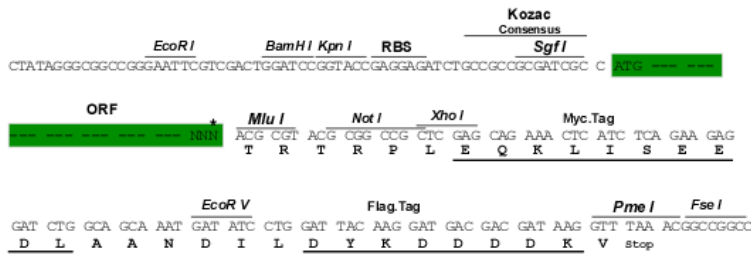
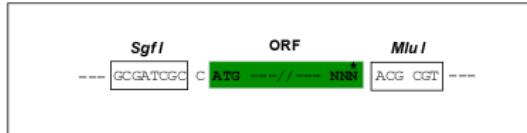
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6336_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_022823

ORF Size: 702 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_022823.3](#)

RefSeq Size: 1697 bp

RefSeq ORF: 705 bp

Locus ID: 64838

UniProt ID: [Q9H6D8](#)

Cytogenetics: 2p23.3

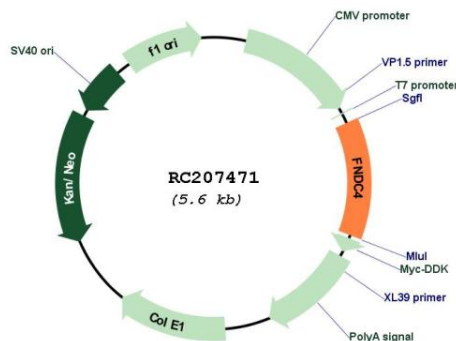
Domains: FN3

Protein Families: Transmembrane

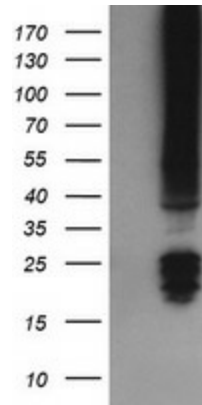
MW: 25.2 kDa

Gene Summary: Acts as an anti-inflammatory factor in the intestine and colon. Binds to and acts on macrophages to downregulate pro-inflammatory gene expression. Affects key macrophage functions, including phagocytosis, by downregulating many key pathways for macrophage activation, partly via by STAT3 activation and signaling. May be required to dampen the immunological response in colitis.[UniProtKB/Swiss-Prot Function]

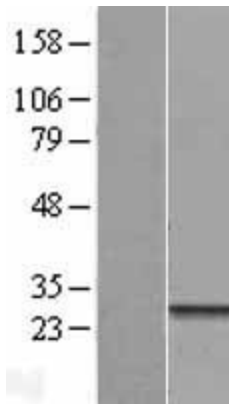
Product images:



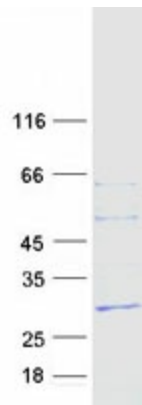
Circular map for RC207471



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FNDC4 (Cat# RC207471, 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-FNDC4(Cat# [TA505462]). Positive lysates [LY411537] (100ug) and [LC411537] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411537]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207471 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FNDC4 protein (Cat# [TP307471]). The protein was produced from HEK293T cells transfected with FNDC4 cDNA clone (Cat# RC207471) using MegaTran 2.0 (Cat# [TT210002]).