

Product datasheet for **RC228748**

Dysadherin (FXYD5) (NM_001164605) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dysadherin (FXYD5) (NM_001164605) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Dysadherin
Synonyms: DYSAD; HSPC113; IWU1; KCT1; OIT2; PRO6241; RIC
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC228748 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGCCCTCTGGTCGCCTGTGTCTTCTTACCATCGTTGGCCTGATTCTCCCCACCAGAGGACAGACGT
TGAAAGATACCACGTCCAGTTCTTCAGCAGACTCAACTATCATGGACATTCAGGTCCCGACACGAGCCCC
AGATGCAGTCTACACAGAACTCCAGCCACCTCTCCAACCCCACTGGCCTGCTGATGAAACACCACAA
CCCCAGACCCAGACCCAGCAACTGGAAGGAACGGATGGGCCTCTAGTGACAGATCCAGAGACACACAAGA
GCACCAAAGCAGCTCATCCACTGATGACACCAGCAGCTCTCTGAGAGACCATCCCAAGCACAGACGT
CCAGACAGACCCCGACCCCTCAAGCCATCTGGTTTTTCATGAGGATGACCCCTTCTTCTATGATGAACAC
ACCTCCGAAACGGGGCTGTTGGTCGACGTGTGCTGTTTCATCACAGGCATCATCCTCACCAGTG
GCAAGTGCAGGCAGCTGTCCCGTTATGCCGGAATCATTGCAGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC228748 protein sequence
Red=Cloning site Green=Tags(s)

MSPSGRLCLLTIVGLILPTRGQTLKDDTSSSSADSTIMDIQVPTRAPDAVYTELQPTSPTPTWPADETPQ
PQTQTQQLLEGTDGPLVTDPEHKSTKAAHPTDDTTLSERPSPSTDVQTDQPQLKPSGFHEDDPFFYDEH
TLRKRGLLVAAVLFITGIIILTSGKCRQLSRLCRNHCR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6001_a02.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001164605

ORF Size: 534 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_001164605.1](#), [NP_001158077.1](#)

RefSeq Size: 917 bp

RefSeq ORF: 537 bp

Locus ID: 53827

UniProt ID: [Q96DB9](#)

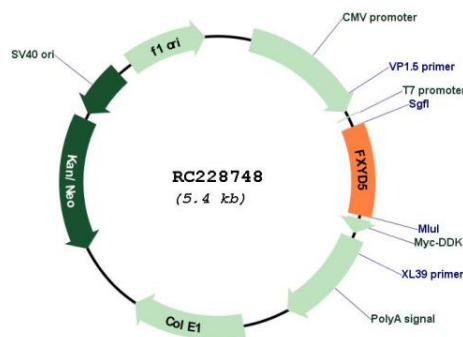
Cytogenetics: 19q13.12

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

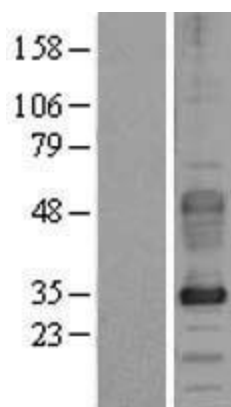
MW: 19.5 kDa

Gene Summary: This gene encodes a member of a family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXVD and containing 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXVD-domain containing ion transport regulator. Mouse FXVD5 has been termed RIC (Related to Ion Channel). FXVD2, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. FXVD1 (phospholemman), FXVD2 (gamma), FXVD3 (MAT-8), FXVD4 (CHIF), and FXVD5 (RIC) have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members (FXVD1 and FXVD2), with the N-terminus extracellular and the C-terminus on the cytoplasmic side of the membrane. This gene product, FXVD5, is a glycoprotein that functions in the up-regulation of chemokine production, and it is involved in the reduction of cell adhesion via its ability to down-regulate E-cadherin. It also promotes metastasis, and has been linked to a variety of cancers. Alternative splicing results in multiple transcript variants. [RefSeq curation by Kathleen J. Sweadner, Ph.D., sweadner@helix.mgh.harvard.edu., Sep 2009]

Product images:



Circular map for RC228748



Western blot validation of overexpression lysate (Cat# [LY431776]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228748 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).