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Product datasheet for RG217411

Dysadherin (FXYD5) (NM_014164) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dysadherin (FXYD5) (NM_014164) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dysadherin
Synonyms:	DYSAD; HSPC113; IWU1; KCT1; OIT2; PRO6241; RIC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG217411 representing NM_014164
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGCCCTCTGGTCGCCTGTGTCTTCTTACCATCGTTGGCCTGATTCTCCCCACCAGAGGACAGACGT
TGAAAGATACCACGTCCAGTTCTTCAGCAGACTCAACTATCATGGACATTCAGGTCCCGACACGAGCCCC
AGATGCAGTCTACACAGAACTCCAGCCCACCTCTCCAACCCCAACCTGGCCTGCTGATGAAACACCACAA
CCCCAGACCCAGACCCAGCAACTGGAAGGAACGGATGGGCCTCTAGTGACAGATCCAGAGACACACAAGA
GCACCAAAGCAGCTCATCCCACTGATGACACCACGACGCTCTCTGAGAGACCATCCCCAAGCACAGACGT
CCAGACAGACCCCCAGACCCTCAAGCCATCTGGTTTTCATGAGGATGACCCCTTCTTCTATGATGAACAC
ACCCTCCGGAAACGGGGGCTGTTGGTCGCAGCTGTGCTGTTCATCACAGGCATCATCATCCTCACCAGTG
GCAAGTGCAGGCAGCTGTCCCGGTTATGCCGGAATCATTGCAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG217411 representing NM_014164
Red=Cloning site Green=Tags(s)

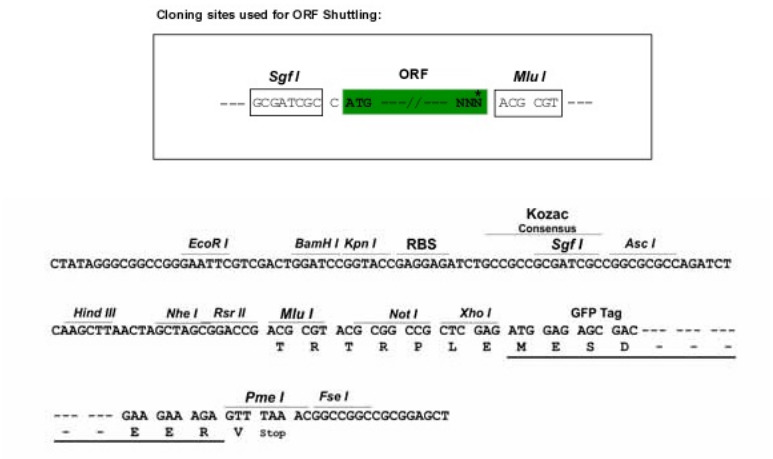
MSPSGRLCLLTIVGLILPTRGQTLKDTTSSSSADSTIMDIQVPTRAPDAVYTELQPTSPTPTWPADETPQ
PQTQTQQLEGTDGPLVTDPETHKSTKAAHPTDDTTTLSERPSPSTDVQTDPQTLKPSGFHEDDPFFYDEH
TLRKRGLLVAAVLFITGIIILTSGKCRQLSRLCRNHCR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN:	NM_014164
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_014164.4, NP_054883.3
RefSeq Size:	890 bp
RefSeq ORF:	537 bp
Locus ID:	53827
UniProt ID:	Q96DB9

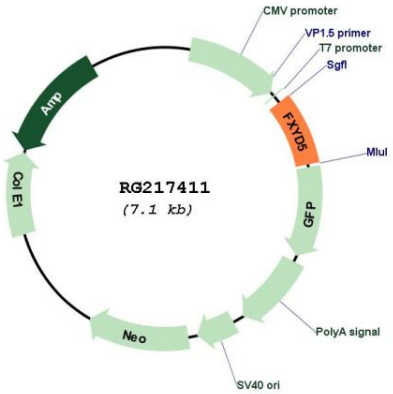
Cytogenetics: 19q13.12

Domains: ATP1G1_PLM_MAT8

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

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 PFXYD and containing 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXYD-domain containing ion transport regulator. Mouse FXYD5 has been termed RIC (Related to Ion Channel). FXYD2, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. FXYD1 (phospholemman), FXYD2 (gamma), FXYD3 (MAT-8), FXYD4 (CHIF), and FXYD5 (RIC) have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members (FXYD1 and FXYD2), with the N-terminus extracellular and the C-terminus on the cytoplasmic side of the membrane. This gene product, FXYD5, 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 RG217411