

## **Product datasheet for RG228748**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# 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: TurboGFP FXYD5

Synonyms: DYSAD; HSPC113; IWU1; KCT1; OIT2; PRO6241; RIC

**Mammalian Cell** Neomycin

Selection:

Symbol:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

**ORF Nucleotide** >RG228748 representing NM\_001164605 Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCGCCCTCTGGTCGCCTGTGTCTTCTTACCATCGTTGGCCTGATTCTCCCCACCAGAGGACAGACGT TGAAAGATACCACGTCCAGTTCTTCAGCAGACTCAACTATCATGGACATTCAGGTCCCGACACGAGCCCC AGATGCAGTCTACACAGAACTCCAGCCCACCTCTCCAACCCCAACCTGGCCTGATGAAACACCACAA CCCCAGACCCAGACCCAGCAACTGGAAGGAACGGATGGGCCTCTAGTGACAGATCCAGAGACACAAGA GCACCAAAGCAGCTCATCCCACTGATGACACCACGACGCTCTCTGAGAGACCATCCCCAAGCACAGACGT CCAGACAGACCCCCAGACCCTCAAGCCATCTGGTTTTCATGAGGATGACCCCTTCTTCTATGATGAACAC ACCCTCCGGAAACGGGGGCTGTTGGTCGCAGCTGTGCTGTTCATCACAGGCATCATCATCCTCACCAGTG

GCAAGTGCAGGCAGCTGTCCCGGTTATGCCGGAATCATTGCAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

>RG228748 representing NM\_001164605 **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MSPSGRLCLLTIVGLILPTRGQTLKDTTSSSSADSTIMDIQVPTRAPDAVYTELQPTSPTPTWPADETPQ PQTQTQQLEGTDGPLVTDPETHKSTKAAHPTDDTTTLSERPSPSTDVQTDPQTLKPSGFHEDDPFFYDEH

TLRKRGLLVAAVLFITGIIILTSGKCRQLSRLCRNHCR

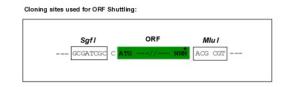
TRTRPLE - GFP Tag - V

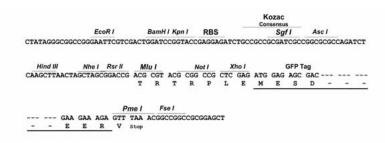
**Restriction Sites:** Sgfl-Mlul



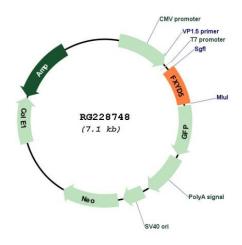


#### **Cloning Scheme:**





#### Plasmid Map:



**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.

#### Dysadherin (FXYD5) (NM\_001164605) Human Tagged ORF Clone - RG228748

**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 001164605.1</u>, <u>NP 001158077.1</u>

 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

**Gene Summary:** This gene encodes a member of a family of small membrane proteins that share a 35-amino

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

acid signature sequence domain, beginning with the sequence PFXYD and containing 7

2009]