

Product datasheet for RN213421

Ficd (NM_001010946) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ficd (NM_001010946) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Ficd
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN213421 representing NM_001010946 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATACTCATGCCGATGGCGTCAGTGGTGGCAGTGGCTGAACCCAAATGGGTCTCAGTCTGGGGCCGT
TCCTGTGGATGACACTGCTGAGCATGGCTCTGGGGTCACTGGCCCTGCTGCCACTGGGAGCTGT
GGAAGAACAGTGTCTGGCTGTGCTCAGAGGCTCCACCTGCTCAGGAGCAAAGTGGACAGGGCACAGCAT
GTGGTCAACCAAGTGCACCAAGCCATCTACGGAGCTCAGTGTACCTCCAGGGACGCAGGGCTGCTGACGG
TCAAGACTAAGGCGTCTCCAGCAGGAAACTGGAAGCCAAGGCCCACTAAACCAAGCCCTAGAGATGAA
GCGCCAAGGCAAGAGGGGCAAAGCGCACAAAGCTCTTCTGCATGCCCTCAAGATGGACCCTGGCTTCGTA
GACGCCCTCAATGAGCTCGGCATCTTCTCAGAAGAGGACAAGGACATCATCCAGGAGATTACCTTACA
CTAGGGCCCTGACCATTTCCGCCCTCCACGAGAAAGCACTGATCAACCGGGACCGGACGCTGCCACTGGT
GGAGGAAATCGACCAGAGGTAATTCAGCGTCCTTACAGCAAAGTGGGAAGGTAATGTCCATCCCTAAG
GGGAGCTCAGCGCTCCGAGGGTCATGGAGGAGACCTACTACCATCACATCTACCACACTGTGGCTATCG
AGGGCAACACCCTCACTCTCGCAGAGATCAGGCACATCCTGGAGACACGCTATGCCGTGCCAGGGAAGAG
CTTGGAGGAGCAAACGAGGTGATCGGCATGCACGCGCCATGAAGTACATCAACAGTACCTGGTCTCC
CGCATCGGGTCCGTCACCATTGACCACATGCTGGAGATCCACAGGAGGGTCTGGGGTACGTGGACCCAG
TGGAGGGCGGGCAGGTTTCGGAGGACCCAGGTCCTGGTGGGACACCACATCCCACCCACCCCGGGACGT
GGAGAAGCAGATGACAGGATTCACACAGTGGCTCAATTCGGAGGACGCCATGAACCTGCACCCGGTTGAG
TTCGCAGCCTTAGCCATTACAACTGGGTACATCCACCCTTTCATCGATGGCAATGGGAGGACCTCCC
GCCTGCTGATGAACCTGATCCTGATGCAGGCAGGGTACCCGCCATCACCATACGCAAGGAGCAGAGGTC
AGAGTACTACCATGTGCTGGAAGTCGCCAACGAGGGTACGTCGCGCCATTATCCGCTTCATAGCCAAG
TGTACGGAAGTCACTGGACACATTGCTCCTCGCCACCACCGAGTACTCTGCAGCACTGCCAGAAGCCC
AGCCCAACCACTCTGGGTTCAAGGAGACTTCTGTGAGGCCT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001010946
Insert Size:	1377 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_001010946.1, NP_001010946.1</u>
RefSeq Size:	1965 bp
RefSeq ORF:	1377 bp
Locus ID:	288741
UniProt ID:	<u>Q6AY47</u>
Cytogenetics:	12q16
Gene Summary:	Protein that can both mediate the addition of adenosine 5'-monophosphate (AMP) to specific residues of target proteins (AMPylation), and the removal of the same modification from target proteins (de-AMPylation), depending on the context (By similarity). The side chain of Glu-231 determines which of the two opposing activities (AMPylase or de-AMPylase) will take place (By similarity). Acts as a key regulator of the ERN1/IRE1-mediated unfolded protein response (UPR) by mediating AMPylation or de-AMPylation of HSPA5/BiP (By similarity). In unstressed cells, acts as an adenylyltransferase by mediating AMPylation of HSPA5/BiP at 'Thr-518', thereby inactivating it (By similarity). In response to endoplasmic reticulum stress, acts as a phosphodiesterase by mediating removal of ATP (de-AMPylation) from HSPA5/BiP at 'Thr-518', leading to restore HSPA5/BiP activity (By similarity). Although it is able to AMPylate RhoA, Rac and Cdc42 Rho GTPases in vitro, Rho GTPases do not constitute physiological substrates (By similarity).[UniProtKB/Swiss-Prot Function]