

Product datasheet for **RC202492**

FRAT2 (NM_012083) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FRAT2 (NM_012083) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FRAT2
Synonyms:	FRAT-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202492 representing NM_012083 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGTGCCGGAGGGAGGAGGAAGAGGAAGCCGGCGAGGAGGCGGAGGGGGAGGAAGAGGAGGACGACA
GCTTCCTCCTGCTGCAGCAGTCGGTGACGCTGGGCGAGCTCGGGCGAGGTGGACCGGCTGGTGCCAGAT
CGGCGAGACGCTGCAGCTGGACGCGGCGCAGGACAGCCCGGCTCGCCGTGCGCGCCCCGGGGTGCCG
CTGCGGGCCCCGGGCCCTGGCTGCGGCGGTGCCGACGACAAGGCCCGGCCCGGCGGTGCCGCTGC
TGCTGCCGCCGCTTCGGCTGAGACGGTGGGCCCGGCGCCCTCTGGGGCCCTGCGCTGCGCCCTAGGGGA
CCGCGGCCGCGTGCAGCGGACGCGCTGCGCCCTACTGCGTGGCGGAGGTGCGCCGACGCGCCAGCGCGCTG
CCGGGGCCGTCGCGGCGAGGATGGCTCAGGGACGCGGTACCTCCCGCCGCTGCAGCAGCGCCGATGGA
CCCAAGCCGGGGCACGCGCCGGGACGACGACCCGCATCGGCTCCTCCAGCAGCTCGTGCTCTCGGGAAA
CCTCATCAAGGAAGCCGTGCGGAGACTCCAACGAGCCGTGCGCGGGTTGCAGCCACGGGCCCGCAAGC
GCCCTGGGCCCGGGGAGGCCGCGAGCGGACCTGACCGCATTGCCCTGCAGCCCTCAGGCTCCTTGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202492 representing NM_012083

Red=Cloning site Green=Tags(s)

MPCRREEEEEAGEEEAEEEEEDDSFLLLQQSVTLGSSGEVDRLVAQIGETLQLDAAQDSPASPCAPPQVP
LRAPGPLAAAVPTDKARPPAVPLLLPPASAETVGPAPSGALRCALGDRGRVVRGRAAPYCVAEVAAGPSAL
PGFCRRGWL RDAVTSRRLQQRRTWQAGARAGDDDPHRLQLQLVLSGNLIKEAVRRLQRAVAAVAATGPAS
APGPGGGRSGPDRIALQPSGSL

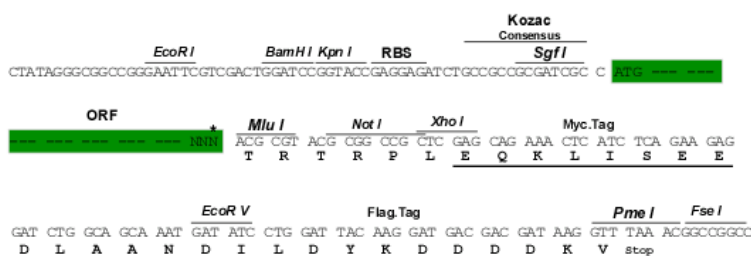
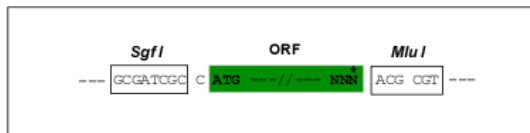
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1475_b02.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_012083

ORF Size: 699 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_012083.3](#)

RefSeq Size: 2222 bp

RefSeq ORF: 702 bp

Locus ID: 23401

UniProt ID: [O75474](#)

Cytogenetics: 10q24.1

Domains: GSK-3_bind

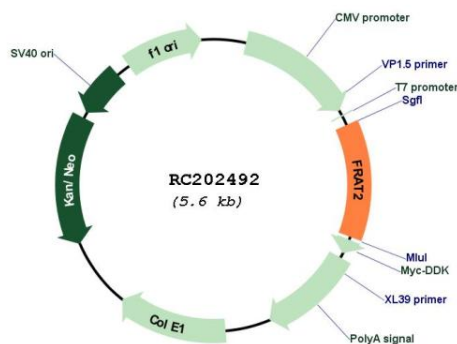
Protein Families: Druggable Genome, ES Cell Differentiation/IPS

Protein Pathways: Wnt signaling pathway

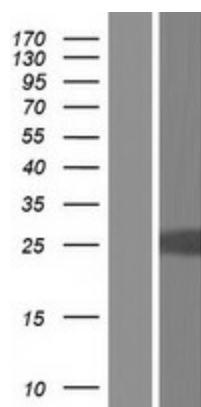
MW: 23.9 kDa

Gene Summary: The protein encoded by this intronless gene belongs to the GSK-3-binding protein family. Studies show that this protein plays a role as a positive regulator of the WNT signaling pathway. It may be upregulated in tumor progression. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC202492



Western blot validation of overexpression lysate (Cat# [LY415987]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202492 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).