

Product datasheet for RG228740

FHIT (NM_001166243) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: FHIT (NM_001166243) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: FHIT

Synonyms: AP3Aase; FRA3B

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

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

ORF Nucleotide >RG228740 representing NM_001166243
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCGTTCAGATTTGGCCAACATCTCATCAAGCCCTCTGTAGTGTTTCTCAAAACAGAACTGTCCTTCG
CTCTTGTGAATAGGAAACCTGTGGTACCAGGACATGTCCTTGTGTGCCCGCTGCGGCCAGTGGAGCGCTT
CCATGACCTGCGTCCTGATGAAGTGGCCGATTTGTTTCAGACGACCCCAGAGAGTCGGGACAGTGGTGGAA
AAACATTTCCATGGGACCTCTCTCACCTTTTCCATGCAGGATGGCCCCGAAGCCGGACAGACTGTGAAGC
ACGTTCACGTCCATGTTCTTCCCAGGAAGGCTGGAGACTTTCACAGGAATGACAGCATCTATGAGGAGCT
CCAGAAACATGACAAGGAGGACTTTCCTGCCTCTTGGAGATCAGAGGAGAAATGGCAGCAGAAGCCGCA

GCTCTGCGGGTCTACTTTCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG228740 representing NM_001166243

Red=Cloning site Green=Tags(s)

MSFRFGQHLIKPSVVFLKTELSFALVNRKPVVPGHVLVCPLRPVERFHDLRPDEVADLFQTTQRVGTVVE KHFHGTSLTFSMQDGPEAGQTVKHVHVHVLPRKAGDFHRNDSIYEELQKHDKEDFPASWRSEEEMAAEAA

ALRVYFQ

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul



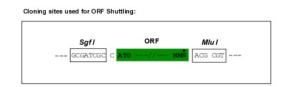
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

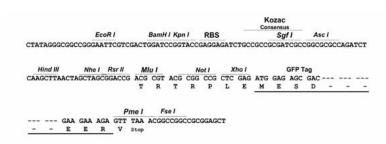
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

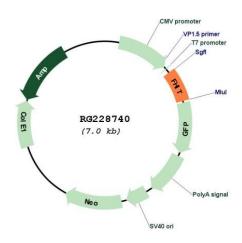


Cloning Scheme:





Plasmid Map:



ACCN: NM 001166243

ORF Size: 441 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.



Cytogenetics:

FHIT (NM_001166243) Human Tagged ORF Clone - RG228740

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.

3p14.2

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 001166243.3

RefSeq Size: 1122 bp RefSeq ORF: 444 bp Locus ID: 2272 **UniProt ID:** P49789

Protein Pathways: Non-small cell lung cancer, Purine metabolism, Small cell lung cancer

Gene Summary: The protein encoded by this gene is a P1-P3-bis(5'-adenosyl) triphosphate hydrolase involved

in purine metabolism. This gene encompasses the common fragile site FRA3B on

chromosome 3, where carcinogen-induced damage can lead to translocations and aberrant transcripts. In fact, aberrant transcripts from this gene have been found in about half of all

esophageal, stomach, and colon carcinomas. The encoded protein is also a tumor

suppressor, as loss of its activity results in replication stress and DNA damage. [provided by

RefSeq, Aug 2017]