

Product datasheet for **RG204546**

GEF H1 (ARHGEF2) (NM_004723) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GEF H1 (ARHGEF2) (NM_004723) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GEF H1
Synonyms:	GEF; GEF-H1; GEFH1; Lfc; LFP40; NEDMHM; P40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG204546 representing NM_004723
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGGAAGCCAAGGATGCCCCGTATACCAATGGGCACCTCTTACCACCATTTTCAGTTTCAGGCATGA
 CCATGTGCTATGCCTGTAAACAAGAGCATCACAGCCAAGGAAGCCCTCATCTGCCAACCTGCAATGTGAC
 TATCCACAACCGCTGTAAAGACACCCTCGCCAACCTGTACCAAGGTCAAGCAGAAGCAACAGAAAGCGGCC
 CTGCTGAAGAACAACACCGCCTTGCAGTCCGTTTCTCTTTCGAAGTAAGACAACCATCCGGGAGCGGCCAA
 GCTCGGCCATCTACCCCTCCGACAGCTTCCGGCAGTCCCTCCTGGGCTCCCGCCGTGGCCGCTCCTCCTT
 GTCTTTAGCCAAGAGTGTCTTACCACCAACATTGCTGGACATTTCAATGATGAGTCTCCCTGGGGCTG
 CGCCGGATCCTCTCACAGTCCACAGACTCCCTCAACATGCGGAACCGAACCTATCCGTGGAATCCCTCA
 TTGACGAAGCAGAGGTAATCTACAGTGAAGTGTGAGTACTTTGAGATGGATGAGAAGGACTTTGCAGC
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 GATGTCTATCTATGAGTAATCCAGACAGAGCTGCACCATGTGAGGACACTGAAGATCATGACCCGCCTCT
 TCCGCACGGGGATGCTGGAAGAGCTACACTTGGAGCCAGGAGTGGTCCAGGGCCTGTTCCCTGCGTGGA
 CGAGCTCAGTGACATCCATACACGCTTCCCTCAGCCAGCTATTAGAACGCCGACGCCAGGCCCTGTGCCCT
 GGCAGCACCCGGAACCTTGTCAATCCATCGCTTGGGTGATCTGCTCATCAGCCAGTTCTCAGGTCCTAGTG
 CGGAGCAGATGTGAAGACCTACTCGGAGTTCTGCAGCCGCCACAGCAAGGCCTTAAAGCTCTATAAGGA
 GCTGTACGCCGAGACAAACGCTTCCAGCAATTCACGGAAAGTGACCCGCCCGCCGCTGCTCAAGCGG
 CACGGGTACAGGAGTGCATCCTGTGGTACTCAGCCATCACCAAGTACCCGTTACTCATCAGCCGCA
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 GGTCAATCAGCAGAGCGTGCACATGCCATCCAGGGAGGACTTCCCCCTGATTGAGACAGAGGATGAG
 GCTTACCTGCGGCGAATTAAGATGGAGTTCAGCAGAAGGACCGGCACCTGGTGGAGCTGCTGCGAGAGA
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 GCCATCCGTGAGGTGGAGGGTCTGAAAGACCTGCTGGTGGGGCCAGGAGTGGAACTGCTCTTGACACCCC
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 TACTCGCTCTGTCCATCGAACTTTGAGGACCGAGAGAGGAGGAACTGGGGAGCCCCGAAGAGCGGCTG
 CAAGACAGCAGTACCCTGACACTGGCAGCGAGGAGGAAGGTAGCAGCCGTCTGTCTCCGCCCCACAGTC
 CACGAGACTTTACCAGAATGCAGGACATCCCGGAGGAGACGGAGAGCCCGCAGCGGGAGGCTGTAGCCTC
 CGAGAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG204546 representing NM_004723
 Red=Cloning site Green=Tags(s)

MKEAKDARYTNGHLFTTISVSGMTMCYACNKSITAKEALICPTCNVTIHNRCKDTLANCTKVQKQKAA
 LLKNNTALQSVSLRSKTTIRERPSSAIYPSDSFRQSLGSRGRSSLAKSVSTNIAGHFNDESPLGL
 RRILSQSTDSLNRNRTL SVESLIDEAEVIYSELMSDFEMDEKDF AADSWSLAVDSSFLLQHQHKEVMKQQ
 DVIYELIQTELHHVRTLKIMTRLFRTGMLEELHLEPGVVQGLFPCVDELSDIHTRFLSOLLERRRQALCP
 GSTRNFVIHRLGDLLISQFSGPSAEQMCKTYSEFCSRHSKALKLYKELYARDKRFQFIRKVTRPAVLKR
 HGVQECILLVTQRITKYPLLISRILQSHGIEEERQDLTTALGLVKELLSNVDEGIYQLEKGARLQEIYN
 RMDPRAQTPVPGKPGFGRSELLRRKLIHDGCLLWKTATGRFKDVLVLLMTDVLVFLQEKDQKYIFPTLDK
 PSVVSLQNLIVRDIANQEKGMFLISAAPPEMYEVHTASRDDRSTWIRVIQQSVRTPCSREDFPLIETED
 AYLRRIKMEQLQKDRALVELLREKVGLFAEMTHFAEEDGGSGMALPTLPRGLFRSELESPPRGERLLQD
 AIREVEGLKDLLVGPVVELLLTPREPALPLEPDSGGNTSPGVTANGEARTFNCSIELCRADSDSSQRDRN
 GNQLRSPQEEALQRLVNLVGLLHGLQAAVAQQDTLMEARFPEGPERREKLCRANSRDGEAGRAGAAPVAP
 EKQATELALLRQHALLQEELRRCRRLGEERATEAGSLEARLRESEQARALLEREAEARRQLAALQOTE
 PLPAEAPWARRPVDPRRSLPAGDALYLSFNPPQPSRGTDRDLDPVTTRS VHRNFEDRERQELGSPEERL
 QDSSDPDTGSEEEGSSRLSPPHSPRDFTRMQDIPETESRDGEAVASES

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

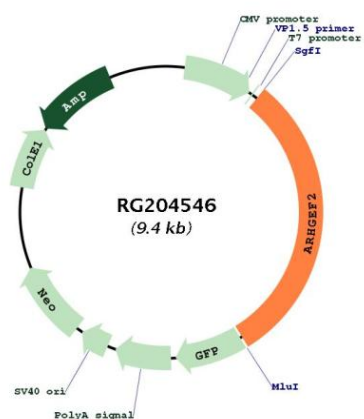


ACCN: NM_004723

ORF Size: 2877 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004723.2 , NP_004714.2
RefSeq Size:	4093 bp
RefSeq ORF:	2877 bp
Locus ID:	9181
UniProt ID:	Q92974
Cytogenetics:	1q22
Domains:	RhoGEF, PH, DAG_PE-bind
Protein Families:	Druggable Genome
Protein Pathways:	Pathogenic Escherichia coli infection
Gene Summary:	Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form complex with G proteins and stimulate rho-dependent signals. Alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Jun 2009]

Product images:



Circular map for RG204546