

Product datasheet for **SC323957**

GEF H1 (ARHGEF2) (NM_004723) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GEF H1 (ARHGEF2) (NM_004723) Human Untagged Clone
Tag:	Tag Free
Symbol:	GEF H1
Synonyms:	GEF; GEF-H1; GEFH1; Lfc; LFP40; NEDMHM; P40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_004723.2
GAGACCAACGCGTGCGGGCCGAACCCCTCCCCCGCCTTCCCCCAACAATACAGGACGCC
GGGGTCCGCGCCGCTCCTCCCTGGTCCCCCGTCCGATTATGTCTCGGATCGAATCCCT
CACGCGGGCGCGGATCGACCGGAGCAGAGAGCTGGCGAGCAAGACCCGGGAAAAGGAGAA
GATGAAGGAAGCCAAGGATGCCCGCTATACCAATGGGCACCTTTCACCAACCATTTCACT
TTCAGGCATGACCATGTGCTATGCCTGTAACAAGAGCATCACAGCCAAGGAAGCCCTCAT
CTGCCCAACCTGCAATGTGACTATCCACAACCGCTGTAAGACACCCTCGCCAACGTAC
CAAGGTCAAGCAGAAGCAACAGAAAGCGGCCCTGCTGAAGAACAACACCCTTGCAGTC
CGTTTCTCTTGAAGTAAGACAACCATCCGGGAGCGGCAAGCTCGGCCATCTACCCCTC
CGACAGCTTCCGGCAGTCCCTCCTGGGCTCCCGCCGTGGCCGCTCCTCTGTCTTTAGC
CAAGAGTGTCTTACCACCAACATTGCTGGACATTTCAATGATGAGTCTCCCTGGGGCT
GCGCCGATCCTCTCACAGTCCACAGACTCCCTAACATGCGGAACCGAACCCATATCCGT
GGAATCCCTCATTGACGAAGCAGAGTAATCTACAGTGAGCTGATGAGTGACTTTGAGAT
GGATGAGAAGGACTTTGCAGTGACTCTTGGAGTCTTGCTGTGGACAGCAGCTTCCCTGCA
GCAGCATAAAAAGGAGGTGATGAAGCAGCAAGATGTCATCTATGAGCTAATCCAGACAGA
GCTGCACCATGTGAGGACACTGAAGATCATGACCCGCCTTCCGCACGGGGATGCTGGA
AGAGCTACACTTGGAGCCAGGAGTGGTCCAGGGCCTGTTCCCCTGCGTGGACGAGCTCAG
TGACATCCATACACGCTTCCCTCAGCCAGCTATTAGAACGCCGACGCCAGGCCCTGTGCC
TGGCAGCACCCGGAACCTTGTGTCATCCATCGCTTGGGTGATCTGCTCATCAGCCAGTTCTC
AGGTCTTAGTGCCGAGCAGATGTGTAAGACCTACTCGGAGTTCTGCAGCCGCCACAGCAA
GGCCTTAAAGCTCTATAAGGAGCTGTACGCCCGAGACAAACGCTTCCAGCAATTCATCCG
GAAAGTGACCCGCCCGCCGTGCTCAAGCGGCACGGGGTACAGGAGTGATCCTGCTGGT
GACTCAGCGCATCACCAAGTACCCGTTACTCATCAGCCGCATCCTGCAGCATTCCACGG
GATCGAGGAGGAGCGCCAGGACCTGACCACAGCACTGGGGCTAGTGAAGGAGCTGCTGTC
CAATGTGGACGAGGGTATTTATCAGCTGGAGAAAGGGCCCGTCTGCAGGAGATCTACAA
CCGCATGGACCTCGGGCCAAACCCAGTGCCTGGCAAGGGCCCTTTGGCCGAGAGGA
ACTTCTGAGGCGCAAACCTCATCCACGATGGCTGCCTGCTCTGGAAGACAGCGACGGGGCG



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CTTCAAAGATGTGCTAGTGTGCTGATGACAGATGACTGGTGTTCCTCCAGAAAAGGA
 CCAGAAGTACATCTTTCCTACCCCTGGACAAGCCTTCAGTGGTATCGCTGCAGAATCTAAT
 CGTACGAGACATTGCCAACAGGAGAAAAGGGATGTTTTCTGATCAGCGCAGCCCCACCTGA
 GATGTACGAGGTGCACACAGCATCCCGGGATGACCGGAGCACCTGGATCCGGGTCAATCA
 GCAGAGCGTGCACACATGCCCATCCAGGGAGGACTTCCCCTGATTGAGACAGAGGATGA
 GGCTTACCTGCGCGAATTAAGATGGAGTTGCAGCAGAAGGACCGGGCACTGGTGGAGCT
 GCTGCGAGAGAAGTTCGGGCTGTTTGTGCTGAGATGACCCATTTCCAGGCCGAAGAGGATGG
 TGGCAGTGGGATGGCCCTGCCACCCTGCCAGGGGCCTTTCCGCTCTGAGTCCCTTGA
 GTCCCCTCGTGGCGAGCGGCTGTGTCAGGATGCCATCCGTGAGGTGGAGGGTCTGAAAGA
 CCTGCTGGTGGGGCCAGGAGTGGAACTGCTCTTGACACCCCGAGAGCCAGCCCTGCCCTT
 GGAACCAGACAGCGGTGGTAACACGAGTCTGGGGTCACTGCCAATGGTGAAGCCAGAAC
 CTTCAATGGCTCCATTGAACTCTGCAGAGCTGACTCAGACTCTAGCCAGAGGGATCGAAA
 TGGAAATCAGTGTGATCACCAGCAAGAGGAGGCGTTACAGCGATTGGTCAATCTCTATGG
 ACTTCTACATGGCTACAGGCAGCTGTGGCCAGCAGGACTCTGATGGAAGCCCGGTT
 CCCTGAGGGCCCTGAGCGCGGGAGAAGCTGTGCCGAGCCAACTCTCGGGATGGGGAGGC
 TGGCAGGGCTGGGCTGCCCTGTGGCCCTGAAAAGCAGGCCACGGAACCTGGCATTACT
 GCAGCGGCAACATGCGCTGCTGCAGGAGGAGCTACGGCGCTGCCGGCGGCTAGGTGAAGA
 ACGGGCAACCGAAGCTGGCAGCCTGGAGGCCCGGCTCCGGGAGAGTGAGCAGGCCCGGGC
 ACTGCTGGAGCGTGAGGCCGAAGAGGCTCGAAGGCAGCTGGCCGCTGGGCCAGACCGA
 GCCACTCCCAGCTGAGGCCCCCTGGGCCCGCAGACCTGTGGATCCTCGGGCGGCAGCCT
 CCCCAGGCGATGCCCTGACTTGAGTTTCAACCCCAACAGCCAGCCAGCCGAGGCACTGA
 CCGCCTGGATCTACCTGTCACTACTCGCTCTGTCCATCGAACTTTGAGGACCGAGAGAG
 GCAGGAAGTGGGAGCCCGAAGAGCGGCTGCAAGACAGCAGTGACCCTGACACTGGCAG
 CGAGGAGGAAGGTAGCAGCGTCTGTCTCCGCCACAGTCCACGAGACTTTACCAGAAT
 GCAGGACATCCCGGAGGAGCAGGAGAGCGCGACGGGGAGGCTGTAGCCTCCGAGAGCTA
 AGGGGGCCCTCCCCCTGCCCGTGCCCACTGAAGAACATTACTGAGGGGGCTAACCT
 TGGGGACTCCAATTTGCCAATGATGAGGGAACATTTGAAAGAAGTCAAATTTGCTCTTGC
 CAGCTCTGGGATCCTTGGATACCTGGGGCCATTTAAGAAGCTAGGGGAATTAGGCCACA
 ACACCCCTGGGACATCCGAAAGCTACACCACAGATGCCAGTGGTTCATGCCTTCTTCCC
 GCAACTTTAGGAAAATTTATTTATTTATTTATTTATTTAGTTATGGGGGAGAGGGGAGATT
 TAAAGGACCAGGGACATGGGAACCAAGCCATAGGGATCAGAGGGCCTTGTCTTGAACAC
 TACTGGGTATATTCAGGCTCATCCACGAGCTGCTGGGTCTTGCCTAACGGCCCTCC
 CCTGCAACATCCGTCTTGGAGGAGAGGCTGCAGCCACAGCACCCCTACTGCCCTTAAATA
 AAGGAGGGCTGTGGGAGGGCCATGTCCCTTCTCCTCTCCCCTCAACCTCTTACTGCTG
 TTCTCCCTTCTCCGTCTTCAATGGAAGCCCTGGGAGATAACCTGGCTTCTGGAGTTGA
 TGGAAATAAGGTTGGGGTGGCCATAATGGTTTGTGGGGTGAGGGAAAAAACCCACAGG
 GACCAGAATGTTTTGTTGTTCTTTGTTTTCTTTTTGTACCAAAGTCAACTGCACGTGT
 TTTTATTTTTAAGAGATCGTAGGCAATTAGAGATCGAAGCCTCCTATCTCCACATCTC
 TGAAGAAGTTGAGGGGTGGGGGAGAGAATGACTTCTGCCTCATCTGCAGTAACGGGGGG
 ACCTATACTGACCTTCTCCAGCCATTTAGAAACAAGTTCTAGGGTGGGTTGAAAAATC
 TCCAAGAGCCCTGACCTCATCTTCCACCTCAGCAACCATGACCTGAAACCTCAGCGTGAA
 TTTGGGGATTTTTAGTGAACCTTGGCCCAATGTGACCAGCCCAATGTGCGA
 AGAATTTCTTCTTGCCAATTTGTTGTTTAAAAAAAAAAAAAAAAA

Restriction Sites:

ECorI-NOT

ACCN:

NM_004723

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).

OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	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:	<p>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]</p> <p>Transcript Variant: This variant (3) has an alternate 5' exon, which results in a downstream AUG start codon, as compared to variant 1. The resulting isoform (3) has a shorter N-terminus, as compared to isoform 1.</p>