

Product datasheet for **RC226030**

GEFT (ARHGEF25) (NM_001111270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	GEFT
Synonyms:	GEFT; p63RhoGEF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC226030 representing NM_001111270
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGAAGCCCCCGACCGCCCCGCCCTGGCCGCACTGACCGGATACTGGGGGTATGGGGGGCATGCTGC
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 AGAGTCTGAACGTACGGAGGGAGATCACAGAAGGGATCGCGAACATGAGGTCTCGCCGGGGCTCTGCAG
 CCCGAATCTATTCCATTGCGGGCAGTGAGGGGAGTATATCGGCTTCTGCTGCCCTCCGGTCTGGCTGCC
 CCTCTGGCCCCAGCTCTGGCTCAGCTCTGGCCCTGTTCCCGAGCCCCAGGGCCCGTCAGTGGCCT
 GAGGAGATGGTTGGATCATTCCAAACATTGTCTCAGTGTGAAACTGAGGCAGACAGTGGTCAGGCAGGA
 CCATATGAGAACTGGATGTTGGAGCCAGCTCTAGCCACAGGAGAGGAGTGCAGGAACTGACCTTGTCTGA
 CCACACTGTTGGAGGGCCCTGGAGATAAGACGCAGCCACCTGAAGAGGAGACTTTGTCCCAAGCCCTGA
 GAGTGAGGAGGAACAGAAGAAGAGCTCTGGAAGGAGTATGTATGCTCCTGAGTGAAGTGTAGAAACA
 GAGAAAATGTACGTGGACGACTTGGGGCAGATTGTGGAGGGTTATATGGCCACCATGGCTGCTCAGGGGG
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 GCTATCAGTCAGGCTGGATCAAGCATGTGGCTCAGATCTTGGAGAGCCAACGGGACTTCCTCAACGCAT
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 AGTGGGAGCCCTGGAAGAATTCGGCTTGGAGATCAGGCCAGGGCAGCACACACACCCCATCAATGGC
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 CCCTTGGTGACATCCCCAGGCTCCCCATGACTCTCCTCCAGTCTCTCCAACCTCAAAAACCCCTCCCTG
 CCAAGCCAGACTTGCCAAGCTGGATGAAGATGAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226030 representing NM_001111270
 Red=Cloning site Green=Tags(s)

MKPPDRPAPGRTDRILGVMGMLRACALPGQEGPPRRSPLGLVGTEPESERTGDRHRRDREHEVLALQ
 PESYSIAGSEGSISASAASGLAAPSGLSSGSPGPPGPVSLRRWLDHSHKCLSVETADSGQAG
 PYENWMLEPALATGEELPELTLLTLLLEPGDKTPPEEETLSQAPSEEEQKKALERSMYVLSELVET
 EKMYVDDLQIIVEGYMATMAAQGVPESLRGRDRIVFGNIQQIYEWHRDYFLQELQRCLKDPDWLAQLFIK
 HERRLHMYVYVCQNKPKSEHVSEFGDSYFEELRQQLGHRLQLNDLLIKPVQRIMKYQLLLKDFLYYNR
 AGMDTADLEQAVEVMCFVPKRCNDMTLGRLRGFEGKLTAAQKLLGQDTFWVTEPEAGLLSSRGRERRV
 FLFEQIIIFSEALGGVVRGQTQPGYVYKNSIKVSCLGLENLQGDPCRFAITSRGPEGGIQRYVLQAADP
 AISQAWIKHVAQILESQRDFLNALQSPIEYQRRESQTNLSGRPRGPGVGSPPGRIRLGDQAQGSHTPIING
 SLPSTLLSPKGEVARALLPLDKQALGDIQAPHDSPPVSPTPKTPPCARLAKLDEDEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8070_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_00111270

ORF Size: 1857 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_00111270.2](#), [NP_001104740.1](#)

RefSeq ORF: 1860 bp

Locus ID: 115557

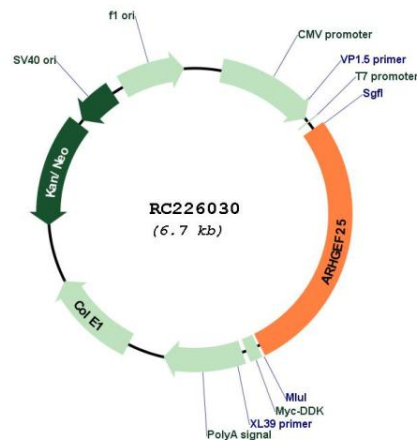
UniProt ID: [Q86VW2](#)

Cytogenetics: 12q13.3

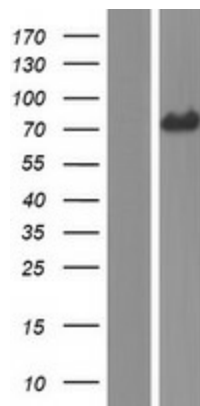
MW: 68 kDa

Gene Summary: Rho GTPases alternate between an inactive GDP-bound state and an active GTP-bound state, and GEFs facilitate GDP/GTP exchange. This gene encodes a guanine nucleotide exchange factor (GEF) which interacts with Rho GTPases involved in contraction of vascular smooth muscles, regulation of responses to angiotensin II and lens cell differentiation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

Product images:



Circular map for RC226030



Western blot validation of overexpression lysate (Cat# [LY426357]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226030 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).