

Product datasheet for **SC124350**

GIT2 (NM_057169) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GIT2 (NM_057169) Human Untagged Clone
Tag:	Tag Free
Symbol:	GIT2
Synonyms:	CAT-2; CAT2; PKL
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene ORF sequence for NM_057169 edited
ATGTCGAAACGGCTCCGGAGCAGCGAGGTGTGCGCTGACTGCAGCGGGCCGGATCCCTTC
TGGGCATCAGTAAATAGGGGAACGTTTTTATGTGATGAGTGTGCAGTGTCCATCGGAGT
CTAGGGCGCCATATCTCCAAGTGAGGCATCTGAAACACACACCGTGGCCTCCAACACTG
CTTCAGATGGTTGAGACCTTGTATAATAACGGTGCTAACTCTATATGGGAGCATTCTTTG
CTGGACCTGCGTCTATTATGAGTGGAAGACGTAAGCTAATCCACAGGATAAAGTACAT
CCCAATAAAGCGGAATTCATCAGAGCCAAGTATCAGATGTTAGCGTTCGTCCATCGCTTG
CCCTGCCGGGATGACGATAGTGTGACTGCCAAAGATCTTAGCAAGCAACTCCATTCCGAGC
GTGAGAACAGGGAATCTTGAAACCTGTTTGAGACTGTTATCTTTAGGAGCACAAGCCAAC
TTCTTTTATCCTGAAAAAGGAAACACCCCACTCCATGTTGCCTCCAAGCAGGGCAGATT
TTACAGGCTGAATTATTGGCAGTATATGGAGCAGACCCAGGCACACAGGATTCTAGTGGG
AAAACCTCCGTTGATTATGCAAGGCAAGGAGGGCACCATGAGCTGGCAGAGCGCCTCGT
GAAATACAGTATGAGCTAACGGACAGACTAGCCTTCTATCTGTGGCAGGAAACCAGAT
CACAAAAATGGACAGCACTTTATAATACCTCAAATGGCAGACAGACGGCTCAGCCTGGAT
TTGTCTGAATTGGCAAAGCTGCTAAGAAGAACTTCAATCTCTAAGTAATCATTGTTT
GAAGAACTTGCCATGGATGTGTACGATGAAGTTGACAGGGCAGAGACGGATGCAGTCTGG
CTTGCCACGCAAAACCACAGCGCCTGGTAACCGAGACAACGGTGTCCCTTTCTTCCG
GTCAATCTGAGTACTCATCAACACGAAATCAGGGCAGACAGAAGTTAGCTCGGTTCAAC
GCCCATGAGTTTGCCACGCTGGTCATTGACATTCTCAGTGACGCCAAGAGGAGACAGCAG
GGCAGTTCTCTCGGGTTCAAAGACAATGTGGAGCTCATACTGAAAACCATCAATAAC
CAGCACAGCGTTGAGAGTCAAGACAACGATCAGCCGACTATGACAGCGTGGCATCAGAC
GAAGACACAGATTTGAAACCACTGCAAGCAAAACAACCGGCAGAAGAGCCTAGATTCA
GATTTATCAGATGGACCAGTCACTGTACAGGAATTTATGGAGGTCAAAAACGCTCTAGTG
GCTTCTGAGGCCAAGATACAGCAGCTAATGAAGGTGAATAACAACCTTGAGTGACGAGCTG
AGAATTATGCAGAAAAAGCTTCAAACACTCCAGAGTGAAAATTCGAACCTCAGGAAAACAG
GCCACAACCAATGTATATCAGGTGCAAACCTGGTTCTGAGTACACAGACACTTCCAACCAC
TCTTCCTTAAAGAGACGTCCGTCTGCCCGGGCAGTAGGCCCATGTCCATGTACGAGACC
GGATCAGGTCAGAAACCATATCTCCAATGGGAGAAGCGAGCCGCCCGAAGAGAGCAGG
ATGAGACTCCAGCCCTTCCCCGCGCACGCATCCAGGCTGGAGAAGCAGAACAGCACACCT
GAGAGTGACTACGACAACACTCCAACGACATGGAGCCAGATGGCATGGGGTCAAGCCGA
AAGGGACGGCAAAGAAGTATGGTGTGGCCAGGGGATGGCTTGGTACCAGACACAGCAGAA
CCCCATGTGGCCCAAGCCCCACTCTCCCTAGCACCGAAGATGTATCAGGAAGACTGAA
CAGATCACAAAAACATACAGGAGCTCTTAAGAGCAGCCCAAGAAAATAAACATGACAGA
AACCCAAGTCTGATATGGTGAGGACTTCCCTTCGTTTACTGACGTCCAGTGCCTACCGAC
TGCAGTGAGAGTGAAGAAGACCCTCCAGGGGACCCCGGCTCACCCACAGACGTTACAGC
TGGTCACGCAGCAGGTATCCAGTGTGCGTACGACATCGCCAAGGCTGCCAAGCAGCTGG
TTACCATCACCACCAAGAGAACAACAACCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_057169 unedited
 TTGTACACGACTTACTATAGGGCGGCCGGAATTCGGCACGAGGGCCGTGAGCGCCGCCG
 CAGCTGGGACCCGTTAGAGCGGAAGCGCCGCCACCAGCCGCTTTGCTGTCCCCGGC
 CTCTAGTTCCTCCGACGGTGGGAGGTGGGAGCCATGTCGAAACGGCTCCGGAGCAGCGAGG
 TGTGCGCTGACTGCAGCGGGCCGGATCCTTCTGGGCATCAGTAAATAGGGGAACGTTTT
 TATGTGATGAGTGTGCAGTGTCCATCGGAGTCTAGGGCGCCATATCTCCAAGTGAGGC
 ATCTGAAACACACACCGTGGCTCCAACACTGCTTCAGATGGTTGAGACCTTGTATAATA
 ACGGTGCTAACTCTATATGGGAGCATTCTTTGCTGGACCCTGCGTCTATTATGAGTGAA
 GACGTAAGCTAATCCACAGGATAAAGTACATCCAATAAAGCGGAATTCATCAGAGCCA
 AGTATCAGATGTTAGCGTTCGTCCATCGCTTGCCTGCCGGATGACGATAGTGTGACTG
 CCAAAGATCTTAGCAAGCAACTCCATTCGAGCGTGAGAACAGGGAATCTTGAAACCTGTT
 TGAGACTGTTATCTTTAGGAGCACAAAGCCAACCTCTTTCATCCTGAAAAAGGAAACCC
 CACTCCATGTTGCCTCCAAAGCAGGGCAGATTNTACAGGCTGAATTATTGGCAGTATATG
 GAGCAGACCCAGGCACACAGGATTCTAGTGGGAAAACCTCCGTTGATTATGCANGGGCAG
 GGAGGCACCATGAGCTGGCAGAGCGCCTCGTGAATACAGTATGAGCTAACGGACAGACT
 AGCCTTCTATCTCTGTGGCAGGANACCAGATCACANAATGGACAGCACTTNNATATC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_057169 unedited
 AATTTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTGTATGAAAATATTTCAATTTATAG
 TTTTCCAGCCATAGGCAGGGAGTTTTAAGGGATGGAAAAGTTTTACAAAACCTTAGACAATG
 AAATACTACTTTTGGATGTATGTGATCAACTCAACAGTTGTTGACAACACAACCGAACAT
 CAGAAAATAAACCAGCAATAGGCACAAAATAAGGCAAGTGGTTAAATAGTTGAAAATT
 GGTTAGAAAACATGCAAAAATAATACTGAGTTTTCTTTTAAAAAGTTTTAAACCGTCATT
 AAATGTTTCTTTTTGTAGAAATCTGAAGAGTTCTGCGTCTGAATTTGAAATTGGACTTTA
 TAAAGCCTAGAAAACAGAGGAGGCGGTGCCCTGCCCTTGTGAGTTGTTGTTCTCTTTGGT
 GGTGATGGTAACCAAGCTGCTTGGCAGCCTTGGCGATGTCGTACGCACACTGGATGACCTG
 CTGCGTGACCAGTGAACGTCTGTGGGTGAGCCGGGGTCCCCTGGGAGGGTCTTCTTGCA
 CTCTGACTGCAGTCGGTAGGCACTGGACGTCAGTAAACGAAGGGAAGTCTCACCATATC
 AGACTTGGGTTTCTGTCTGTTTATTNTCTTGGGCTGCTCCTAAGAGCTCCTGTATGTTT
 TTGGTATCTGTTTCAGTCTTCTGATGACATCCTTCGTGCCTAGGAAAAGTGGGTTGGG
 GCCCATGGGGTTCTGCTGTGTTTGTACCAGCCATCCCCTGGCCAACCACTTTTTTGN
 CGCCCTTCCGGTTGACCCATGCCATTTGCCTCATGTCGTGGAATGTTGCCTAACACCT
 CTCAGGTGCCTGTCTGTTCTCCACCTGTATCCTTCCCGGAAAGCTCGANTCTATCCTGG
 TTTTTCGGGGGGTGTTTTTCCATTGGAAGAAAGGTTTTGACCTATCCGCTCTTAAGTGC
 AAGGGCCACTGCCCGCCAAAAGAGTTTTAAGAAAAGGTGAAGGCCGTTTCCAAAN

Restriction Sites:

NotI-NotI

ACCN:

NM_057169

Insert Size:

2820 bp

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).

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_057169.2](#), [NP_476510.1](#)

RefSeq Size: 5525 bp

RefSeq ORF: 2280 bp

Locus ID: 9815

UniProt ID: [Q14161](#)

Cytogenetics: 12q24.11

Protein Families: Druggable Genome

Protein Pathways: Endocytosis

Gene Summary: This gene encodes a member of the GIT protein family, which interact with G protein-coupled receptor kinases and possess ADP-ribosylation factor (ARF) GTPase-activating protein (GAP) activity. GIT proteins traffic between cytoplasmic complexes, focal adhesions, and the cell periphery, and interact with Pak interacting exchange factor beta (PIX) to form large oligomeric complexes that transiently recruit other proteins. GIT proteins regulate cytoskeletal dynamics and participate in receptor internalization and membrane trafficking. This gene has been shown to repress lamellipodial extension and focal adhesion turnover, and is thought to regulate cell motility. This gene undergoes extensive alternative splicing to generate multiple isoforms, but the full-length nature of some of these variants has not been determined. The various isoforms have functional differences, with respect to ARF GAP activity and to G protein-coupled receptor kinase 2 binding. [provided by RefSeq, Sep 2008]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).