

## Product datasheet for **SC321308**

### **GIT2 (NM\_139201) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GIT2 (NM_139201) Human Untagged Clone
Tag:	Tag Free
Symbol:	GIT2
Synonyms:	CAT-2; CAT2; PKL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_139201.1  
 CCGCCGCCACCGCCCTTTGCTGTCCCCCGGCCTCTAGTTCCCCGCAGGTGGGAGGTGG  
 GAGCCATGTGAAACGGCTCCGGAGCAGCGAGGTGTGCGTGACTGCAGCGGGCCGGATC  
 CTTCTGGGCATCAGTAAATAGGGGAACGTTTTTATGTGATGAGTGCTGCAGTGTCCATC  
 GGAGTCTAGGGGCCATATCTCCAAGTGAAGCATCTGAAACACACACCGTGGCCTCCAA  
 CACTGCTTCAGATGGTTGAGACCTTGTATAATAACGGTGCTAACTCTATATGGGAGCATT  
 CTTTGTGGACCCTGCGTCTATTATGAGTGGAAGACGTAAGCTAATCCACAGGATAAAG  
 TACATCCCAATAAAGCGGAATTCATCAGAGCCAAGTATCAGATGTTAGCGTTCGTCCATC  
 GCTTGCCCTGCCGGGATGACGATAGTGTGACTGCCAAAGATCTTAGCAAGCAACTCCATT  
 CGAGCGTGAGAACAGGAATCTTGAAACCTGTTTGAAGTGTATCTTTAGGAGCACAAG  
 CCAACTCTTTTCATCCTGAAAAAGGAAACACCCCACTCCATGTTGCTCCAAAGCAGGGC  
 AGATTTTACAGGCTGAATTATTGGCAGTATATGGAGCAGACCCAGGCACACAGGATTCTA  
 GTGGGAAAACCTCCGTTGATTATGCAAGGCAAGGAGGGCACCATGAGCTGGCAGAGCGCC  
 TCGTGAAATACAGTATGAGCTAACGGACAGACTAGCCTTCTATCTGTGGCAGGAAAAC  
 CAGATCACAAAAATGGACAGCACTTTATAATACCTCAAATGGCAGACAGCAGCCTGGATT  
 TGCTGAATTGGCAAAAGCTGCTAAGAAGAACTCAATCTCTAAGTAATCATTTGTTTG  
 AAGAACTTGCCATGGATATGTACGATGAAGTTGACAGGGCAGAGACGGATGCAGTCTGGC  
 TTGCCACGCAAAACCACAGCGCCCTGGTAACCGAGACAACGGTCGTCCCCCTTTCTCCGG  
 TCAATCCTGAGTACTCATCAACACGAAATCAGGGCAGACAGAAGTTAGCTCGGTTCAACG  
 CCCATGAGTTTGGCCACGCTGGTCATTGACATTCTCAGTGACGCCAAGAGGAGACAGCAGG  
 GCAGTTCTCTCTCGGTTCAAAGACAATGTGGAGCTCATACTGAAAACCATCAATAACC  
 AGCACAGCGTTGAGAGTCAAGACAACGATCAGCCCGACTATGACAGCGTGGCATCAGACG  
 AAGACACAGATTTGGAACCACTGCAAGCAAAACAAACCGGCAGAAAGCCTAGATTGAG  
 ATTTATCAGATGGACCAGTCACTGTACAGGAATTTATGGAGGTCAAAAACGCTCTAGTGG  
 CTTCTGAGGCCAAGATACAGCAGCTAATGAAGGTGAATAACAACCTGAGTGACGAGCTGA  
 GAATTATGCAGAAAAAGTTGCTTGAAAAAGATGCTAATTAATGAAGAGGAGCAACTACTA  
 TTGGTGTATTTTTACAGATTGGTGCTTTCTAAATAAAAATTGAAAGTAACCTCTAACAT  
 TGAATGGGTTTGTACTGAAAAAGTAAATGATCTTCTGGTGCAAACAGTTGCTTGTGGACT  
 TAAACCTTGGCACTGGTGGGAATTTGGTCAGATTTTACAATCTCTGTCAAAGAGTAGAC  
 AGCTGAACTCACACCACACCCAGCTTATAGAATGTCCATGGAAGATGAAGGCCACCAGA  
 AGGGAAGGACCCGCGCAGAATGGACGTGGTGAATGGTGTAAAATGCCAGATGCCAAA  
 GAGTAACACGATTCCTGCTGACCCCTTAACTCTAATCCATCCAGCACCATGGAGCAGCC  
 TGATGTGAGGAATGGAAGGAGCATTGAGGCCTCCAAGTGACAGTCTCTAAAATGGGGT  
 GGTGCCAGGCAGATTAGCATGTTCAAAGCTGACACCACTGAGGTCGTGTTTTTGGGTGA  
 CAAAGCCAAAGGAGAGAAAGGCCAAATATTCCAGCCCTGGCCGAAAGATGATCACTCACC  
 AGACGGAAGCAAGCGTGTGCGTGGAGCATCCATGCGAAGATGTCAATCCATAGATCAA  
 TAGGTTTCCAGTTTTCTCGTGATATGTTAATATAGCAAACCTTACCATGATCCGGTTTTT  
 TCTTTTTCTTTTTTTTTTACAAAGTGCTGAATTGTTTTGGAATATCAAGAGTATTATGT  
 AATAAAAACCTTGTGATCATAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Please inquire

**ACCN:** NM\_139201

**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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_139201.1, NP_631940.1</u>
<b>RefSeq Size:</b>	2264 bp
<b>RefSeq ORF:</b>	1416 bp
<b>Locus ID:</b>	9815
<b>Cytogenetics:</b>	12q24.11
<b>Domains:</b>	ArfGap, ANK
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Endocytosis
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (4) lacks most 3' exons and has an alternate exon at the 3' end, as compared to variant 1. Isoform 4 is much shorter and has a different C-terminus than isoform 1.</p>