

Product datasheet for **SC303613**

GLI2 (NM_005270) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: GLI2 (NM_005270) Human Untagged Clone
Tag: Tag Free
Symbol: GLI2
Synonyms: CJS; HPE9; PHS2; THP1; THP2
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_005270 edited
 ATGGAGACGTCTGCCTCAGCCACTGCCTCCGAGAAGCAAGAAGCCAAAAGTGGGATCCTG
 GAGGCCGCTGGCTTCCCCGACCCGGTAAAAAGGCCTCTCCTTTGGTGGTGCAGCG
 GCAGCAGCAGCGGTAGCTGCCAAGGAGTGCCGACGATCTCTTGCACCATTCATGCG
 CCCCTACCGATTGACATGCGACACCAGGAAGGAAGGTACCATTACGAGCCTCATTCTGTC
 CACGGTGTGCACGGGCCCTGCCTCAGCGGCAGCCCTGTCATCTGACATCTCCTTG
 ATCCGGCTTTCCCGCACCCGGCTGGCCCTGGGGAGTCCCTTCAACGCCCCCACCCG
 TACGTGAACCCACATGGAGCACTACCTCCGTTCTGTGCACAGCAGCCCACGCTCTCC
 ATGATCTCTGCAGCCAGGGCCCTCAGCCCCGCTGATGTGGCCAGGAGCACCTTAAGGAG
 AGGGGACTGTTTGGCCTTCTGTCCAGGCACCACCCCTCAGACTATTACCACCAGATG
 ACCCTCGTGGCAGGCCACCCCGCCCTACGGGGACCTGCTGATGCAGAGCGGGGGCGCT
 GCCAGCGCACCCATCTCCACGACTACCTCAACCCCGTGACGTGTCCCGTTTCTCCAGC
 CCGCGGGTGACGCCCCGCTGAGCCGCAAGCGGGCGCTGTCCATCTCCCACTCTCAGAC
 GCCAGCCTGGACCTGCAGCGGATGATCCGCACCTCACCAACTCGCTAGTGGCCTACATC
 AACAACTCCCGAAGCAGCTCAGCGGCCAGCGGTTCTACGGGCATCTGTGAGCGGGTGC
 CTCAGCCCAGCCTTACCTTCCCCACCCCATCAACCCGTGGCCTACCAGCAGATTCTG
 AGCCAGCAGAGGGGTCTGGGGTCAAGCCTTTGGACACACACCACCCTGATCCAGCCCTCA
 CCCACCTTCTGGCCAGCAGCCATGGCCCTCACCTCCATCAATGCCACGCCACCCAG
 CTCAGCAGCAGCAACTGTCTGAGTGACACCAACAGAAAGCAGCAGCAGTGTGAGTCG
 GCCGTCAGCAGCACCGTCAACCCGTGCGCCATTACAAGCGCAGCAAGGTCAAGACCGAG
 CCTGAGGGCTGCGGCCGCTCCCTCTGGCGCTGACGAGGGCCAGGTGTCTGGACAC
 GGCTCATGTGGGTGTGCCCTTCCCTCTCCAGGAGCAGCTGGCTGACCTCAAGGAAGAT
 CTGGACAGGGATGACTGTAAGCAGGAGGCTGAGGTGGTCACTATGAGACCAACTGCCAC
 TGGGAAGACTGCACCAAGGAGTACGACACCCAGGAGCAGCTGGTGCATCACAACAAC
 GAGCACATCCACGGGGAGAAGAAGGAGTTTGTGTGCCGCTGGCAGGCCTGCACGGGGAG
 CAGAAGCCCTTCAAGGCGCAGTACATGCTGGTGGTGCACATGCGGCGACACACGGGGAG
 AAGCCCCACAAGTGCACGTTTCGAGGGCTGCTCGAAGGCCTACTCCCGCTGGAGAACCTG



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AAGACACACCTGCGGTCCCACACCGGGGAGAAGCCATATGTGTGTGAGCACGAGGGCTGC
AACAAAGCCTTCTCCAACGCCTCGGACCGGCCAAGCACCAGAATCGCACCCACTCCAAC
GAGAAACCTACATCTGCAAGATCCCAGGCTGCACCAAGAGATACACAGACCCGACTCT
CTCCGGAAGCATGTGAAAACGGTCCACGGCCAGATGCCACGTACCAAGAAGCAGCGC
AATGACGTGCACCTCCGCACACCGCTGCTCAAAGAGAATGGGGACAGTGAAGCCGGCAGC
GAGCCTGGCGGCCAGAGAGCACCGAGGCCAGCAGCACCAGCCAGGCCGTGGAGGACTGC
CTGCACGTGAGCCATCAAGACCGAGAGCTCCGGGCTGTGTAGTCCAGCCCGGGGCC
CAGTCGTCTGACGAGCGAGCCCTCTCCTCTGGGCAAGTCCCAACAATGACAGTGGC
GTGGAGATGCGGGGACGGGGCCGGGAGCCTGGGAGACCTGACGGCACTGGATGACACA
CCCCAGGGGCCGACACCTCAGCCCTGGCTGCCCCCTCCGCTGGTGGCTCCAGTGCGC
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AAGGATTCTGCTCATGGGCCGGGCCGACTCCACACACGCGGAACACCAAGTGCCTCCC
CTCCCGGAAGTGGTCCATCCTGGAAACTTCAGTGGCAGTGGGGCGGGGGCCCGCG
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CAGCTGCAGGAGCGCCGACAGCTCCACCAGCAGGTCAGCTCGGCCTACACCGTGCAGC
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CCGCCCCACTCCGCTGCCGGGCTGGAGCGCATGAGCCTGCGGACCCAGGCTGGCGCTGCTG
GACGCGCCCGAGCGCAGCTGCCCGCGGCTGCCACGCCCCACTGGGGCCGGCGGTGGC
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GCTCCAGGCGCGGAGCCAGGCGGGCCAGCGACCCTGTGCGGGCGGCCGATGCCCTGTCC
CTGCGCGGGTGCAGCGCTTCCACAGCACCCACAACGTGAACCCCGGGCCCGCTGCCGCC
TGTGCCGACAGGCGAGGCTCCGCTGACAGGCCACCCGAGCACCAGCGCGGCTGGCC
CGCGGCGCTACTCGCCCGGCCGCTAGCATCAGCGAGAACGTGGCGATGGAGGCCGTG
GCGGCAGGAGTGGACGGCGGGGCCGAGGCCGACTGGGGCTGCCGAGGACGACCTG
GTGCTTCCAGACGAGTGGTGCAGTACATCAAGGCGCACGCCAGTGGCGCTCTGGACGAG
GGCACCGGCAGGTGATCCCACGGAAGCACTGGCTTCTGACAACCCAGACTACCC
AGCCCGGGGTGCACGGCAGCGCAGGATGGTGGCTGCGGACTCCAACGTGGGCCCTCC
GCCCTATGCTGGGAGGATGCCAGTTAGGCTTTGGGGCGCCCTCCAGCCTGAACAAAAAT
AACATGCCTGTGAGTGAATGAGGTGAGCTCCGGCACCGTAGAGCCCTGGCCAGCCAG
GTGAAGCCTCCACCCCTTCTCAGGGCAACCTGGCGGTGGTGCAGCAGAAGCCTGCCTTT
GGCCAGTACCCGGGCTACAGTCCGCAAGGCTACAGGCTAGCCCTGGGGGCTGGACAGC
ACGCAGCCACACCTGCAGCCCCGAGCGGAGCCCCCTCCAGGGCATCCCAGGGTAAAC
TACATGCAGCAGTGCAGACGCCAGTGGCAGGCAGCCAGTGTCTGGCATGACTACCACT
ATGAGCCCCATGCCTGCTATGGCCAAGTCCACCCCAAGTGCAGCCAGCCAGCCATCAGT
GGGGCCCTCAACCAGTTCGCCAATCCTGCAGCAACATGCCAGCAAGCCAGGGCATCTG
GGCACCCCTCAGCAGACAGAAGTGGCACCTGACCCACCCAGATGGCAATCGCCACAGG
GAACTTGGGGTCCCGATTTCAGCCCTGGCTGGAGTGCACCCACCTCACCCAGTCCAGAGC
TACCCACAGCAGGCCATCACCTGGCAGCCTCCATGAGCCAGGAGGGCTACCACCAAGTGC
CCCAGCCTTCTGCCTGCCCGCCAGCCTGGCTTTCATGGAGCCCCAAACAGGCCCGATGGG
GTGGCTACAGCAGGCTTTGGCTAGTGCAGCCCCGGCCTCCCCTCGAGCCAGCCCCACT
GGCCGCCACCGTGGGTACGTGCTGTGCAGCAGCAGCTGGCTACGCCAGGGCCACAGGC
CATGCCATGGTGCATGCCGTCCAGTCAAGAAACAGCAGAGGCTGTGCCAAGGGAGCG
ATGGGCAACATGGGTGGTGCCTCCCCAGCCGCTCCGACAGGACGAGGTGGGGCCCCG
GACCACAGCATGTCTACTACTACGGCCAGATCCACATGTACGAACAGGATGGAGGCCTG
GAGAACCTCGGGAGCTGCCAGGTATGCGGTCCAGCCACACAGCCACAGGCCTGTGAG
GACAGCATCCAGCCCCAGCCCTTGCCTCACCAGGGGTCAACCAGGTGTCCAGCAGTGTG
GACTCCCAGCTCCTGGAGGCCCCCCAGATTGACTTCGATGCCATCATGGATGATGGCGAT
CACTCGAGTTTGTCTCGGGTGTCTGAGCCCCAGCCTCCTCCACAGCCTCTCCAGAAC
TCCTCCCGCTCACACCCCGAAACTCCTTGACCCTGCCCTCCATCCCCGAGGCATC

AGCAACATGGCTGTCGGGGACATGAGCTCCATGCTCACCAGCCTCGCCGAGGAGAGCAAG
TTCCTGAACATGATGACCTAG

Restriction Sites:	Please inquire
ACCN:	NM_005270
Insert Size:	6000 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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 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_005270.2 , NP_005261.1
RefSeq Size:	3580 bp
RefSeq ORF:	2439 bp
Locus ID:	2736
UniProt ID:	P10070
Cytogenetics:	2q14.2
Protein Families:	Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS
Protein Pathways:	Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer

Gene Summary:

This gene encodes a protein which belongs to the C2H2-type zinc finger protein subclass of the Gli family. Members of this subclass are characterized as transcription factors which bind DNA through zinc finger motifs. These motifs contain conserved H-C links. Gli family zinc finger proteins are mediators of Sonic hedgehog (Shh) signaling and they are implicated as potent oncogenes in the embryonal carcinoma cell. The protein encoded by this gene localizes to the cytoplasm and activates patched Drosophila homolog (PTCH) gene expression. It is also thought to play a role during embryogenesis. The encoded protein is associated with several phenotypes- Greig cephalopolysyndactyly syndrome, Pallister-Hall syndrome, preaxial polydactyly type IV, postaxial polydactyly types A1 and B. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (4) lacks an internal 51 nt, but maintains the same reading frame as variant 1 until the second exclusion. This exclusion occurs 1231 nt from the 3' end of the coding region and causes a frameshift. Thus, the resulting iso