

Product datasheet for RC217291

GLI2 (NM_005270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GLI2 (NM_005270) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GLI2
Synonyms:	CJS; HPE9; PHS2; THP1; THP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217291 representing NM_005270 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC217291 representing NM_005270
 Red=Cloning site Green=Tags(s)

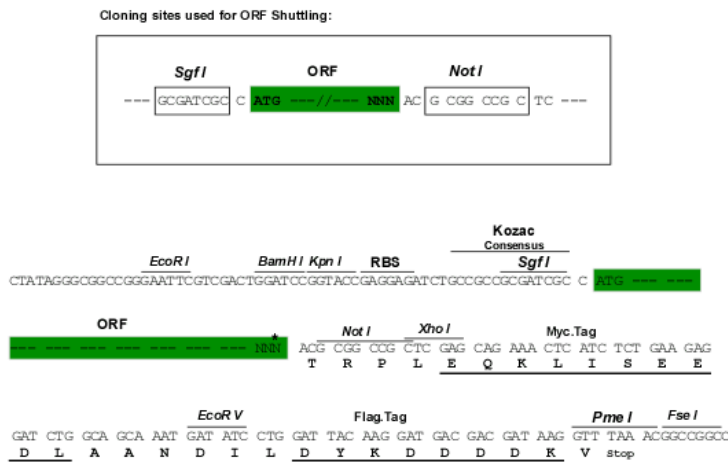
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Chromatograms: https://cdn.origene.com/chromatograms/mg3062_c01.zip

Restriction Sites: SgfI-NotI

Cloning Scheme:



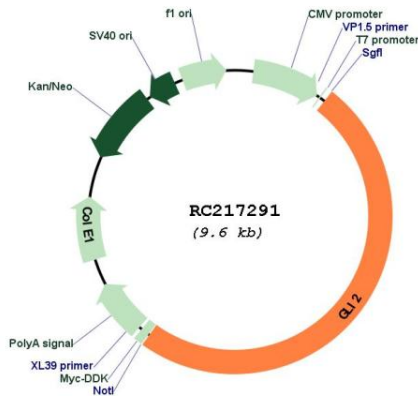
* The last codon before the Stop codon of the ORF

ACCN: NM_005270

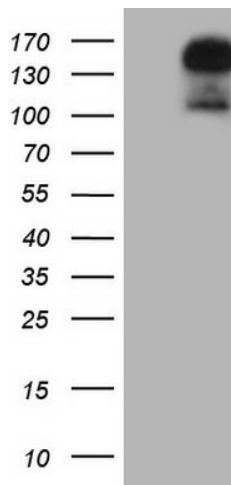
ORF Size:	4758 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005270.5
RefSeq Size:	6549 bp
RefSeq ORF:	4761 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
MW:	167.6 kDa

Gene Summary:

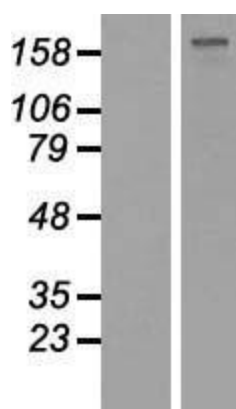
This gene encodes a protein which belongs to the C2H2-type zinc finger protein subclass of the Gli family. Members of this subclass are characterized as transcription factors which bind DNA through zinc finger motifs. These motifs contain conserved H-C links. Gli family zinc finger proteins are mediators 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]

Product images:


Circular map for RC217291



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GLI2 (Cat# RC217291, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GLI2(Cat# [TA804549]). Positive lysates [LY417413] (100ug) and [LC417413] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417413]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217291 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).