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GLI2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20619c

Product Information

Application	WB, IF, FC, IHC-P-Leica, E
Primary Accession	P10070
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB49147
Calculated MW	167783

Additional Information

Gene ID	2736
Other Names	Zinc finger protein GLI2, GLI family zinc finger protein 2 {ECO:0000312|HGNC:HGNC:4318}, Tax helper protein, GLI2 (HGNC:4318)
Target/Specificity	This GLI2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1287-1321 amino acids from the C-terminal region of human GLI2.
Dilution	WB~~1:1000 IF~~1:25 FC~~1:25 IHC-P-Leica~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GLI2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GLI2 {ECO:0000303|PubMed:9557682, ECO:0000312|HGNC:HGNC:4318}
Function	Transcription factor that acts as a key effector of the smoothened signaling pathway, and which plays a role in skeleton development (PubMed:15994174, PubMed:18455992, PubMed:19878745, PubMed:20154143,

PubMed:20685856, PubMed:24311597, PubMed:26565916, PubMed:9557682). Specifically binds to the minimal GLI-consensus sequence 5'-GACCACCCA-3' to activate or repress the expression of target genes (By similarity). Functions both as a transcriptional activator and repressor: the full-length GLI2 form (Transcription activator GLI2) acts as a transcription activator following smoothened activation, while the Transcription repressor GLI2R, which is generated in absence of smoothened, acts as a transcription repressor (By similarity). The transcriptional activator form constitutes the major form of GLI2 (By similarity).

Cellular Location

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q0VGT2} Cell projection, cilium. Note=Full-length GLI2 is sequestered in the cytoplasm by SUFU in absence of smoothened signaling. {ECO:0000250|UniProtKB:Q0VGT2} [Transcription repressor GLI2R]: Nucleus {ECO:0000250|UniProtKB:Q0VGT2}. Note=Following generation by proteolytic processing in absence of smoothened, translocates to the nucleus, where is represses transcription of target genes {ECO:0000250|UniProtKB:Q0VGT2} [Isoform 2]: Nucleus

Tissue Location

Expressed in breast cancers (at protein level) (PubMed:26565916). Isoform 1 and isoform 4 are expressed in HTLV-1- infected T-cell lines (at protein level) (PubMed:9557682). Isoform 1 and isoform 2 are strongly expressed in HTLV-1-infected T-cell lines (PubMed:9557682). Isoform 3 and isoform 4 are weakly expressed in HTLV- 1-infected T-cell lines (PubMed:9557682).

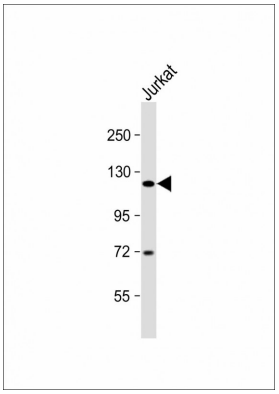
Background

Acts as a transcriptional activator. May play a role during embryogenesis. Binds to the DNA sequence 5'-GAACCACCCA-3' which is part of the TRE-2S regulatory element that augments the Tax-dependent enhancer of human T-cell leukemia virus type 1. Is involved in the smoothened (SHH) signaling pathway.

References

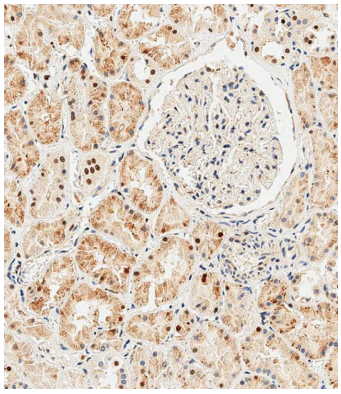
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Roessler E.,et al.Hum. Mol. Genet. 14:2181-2188(2005).
Hillier L.W.,et al.Nature 434:724-731(2005).
Tanimura A.,et al.J. Virol. 67:5375-5382(1993).
Ruppert J.M.,et al.Mol. Cell. Biol. 8:3104-3113(1988).

Images

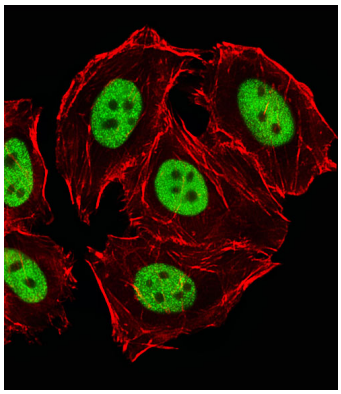


Anti-GLI2 Antibody (C-term) at 1:2000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 168 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

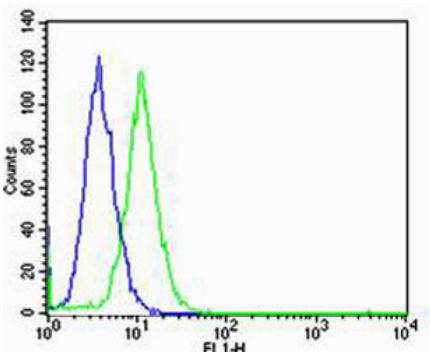
Immunohistochemical analysis of paraffin-embedded Human kidney tissue using AP20619c performed on the



Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Fluorescent image of Hela cells stained with GLI2 Antibody (C-term)(Cat#AP20619c). AP20619c was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Flow cytometric analysis of Hela cells using GLI2 Antibody (C-term)(green, Cat#AP20619c) compared to an isotype control of rabbit IgG(blue). AP20619c was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.