# GLI2 polyclonal antibody

Catalog # PAB10051 Size 100 ug

# Applications



### Western Blot

Western blot using GLI2 polyclonal antibody (Cat # PAB10051) shows detection of GLI2 protein in rat testes (Lane 1) and human HEK293 (Lane 2) whole cell lysates (arrowhead).

See Ruppert et al for testing conditions.

Each lane contains approximately 35 ug of lysate.

Primary antibody was used at a 1:400 dilution in 5% BLOTTO in PBS overnight at 4°C.

The membrane was washed and reacted with a 1:10,000 dilution of IRDye® 800 conjugated Gt-a-Rabbit IgG [H&L] MX10 for 45 min at room temperature (800 nm channel, green).

Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red).

IRDye® 800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

IRDye is a trademark of LI-COR, Inc.

### Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)



Immunohistochemistry of GLI2 polyclonal antibody (Cat # PAB10051) shows strong cytoplasmic and membranous staining of tumor cells in human breast tissue.

Tissue was formalin-fixed and paraffin embedded.

Brown color indicates presence of protein, blue color shows cell nuclei.

Personal Communication, Kenneth Wester, www.proteinatlas.org, Uppsala, Sweden.

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### **Product Information**

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of GLI2.
Immunogen	A synthetic peptide corresponding to amino acids 46-60 of human GLI2.
Host	Rabbit
Reactivity	Human
Specificity	Expect reactivity with all isoforms of this protein.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:10,000-1:3,0000) Western Blot (1:500-1:2000) Immunohistochemistry (1:500-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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#### • Enzyme-linked Immunoabsorbent Assay

## Gene Info — GLI2

Entrez GenelD	2736
Protein Accession#	P10070;NP_084655(isoformalpha)
Gene Name	GLI2
Gene Alias	HPE9, THP1, THP2
Gene Description	GLI-Kruppel family member GLI2
Omim ID	<u>165230 610829</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a protein which belongs to the C2H2-type zinc finger protein subclass of the G li family. Members of this subclass are characterized as transcription factors which bind DNA thro ugh zinc finger motifs. These motifs contain conserved H-C links. Gli family zinc finger proteins ar e mediators of Sonic hedgehog (Shh) signaling and they are implicated as potent oncogenes in t he embryonal carcinoma cell. The protein encoded by this gene localizes to the cytoplasm and act ivates patched Drosophila homolog (PTCH) gene expression. It is also thought to play a role durin g embryogenesis. The encoded protein is associated with several phenotypes- Greig cephalopol ysyndactyly syndrome, Pallister-Hall syndrome, preaxial polydactyly type IV, postaxial polydactyly types A1 and B. [provided by RefSeq
Other Designations	oncogene GLI2 tax helper protein 1 tax helper protein 2 tax-responsive element-2 holding protein t ax-responsive element-25-bp sequence binding protein zinc finger protein GLI2

## **Publication Reference**

• <u>GLI-mediated Keratin 17 expression promotes tumor cell growth through the anti-apoptotic function in oral</u> <u>squamous cell carcinomas.</u>

Mikami Y, Fujii S, Nagata K, Wada H, Hasegawa K, Abe M, Yoshimoto RU, Kawano S, Nakamura S, Kiyoshima T. Journal of Cancer Research and Clinical Oncology 2017 Mar; [Epub].

Application: IHC-P, WB-Tr, Human, Human oral squamous cell carcinomas, HSC-2 cells



Inhibition of hedgehog signaling for the treatment of murine sclerodermatous chronic graft-versus-host disease.

Zerr P, Palumbo-Zerr K, Distler A, Tomcik M, Vollath S, Munoz LE, Beyer C, Dees C, Egberts F, Tinazzi I, Del Galdo F, Distler O, Schett G, Spriewald BM, Distler JH.

Blood 2012 Oct; 120(14):2909.

Application: IHC-P, Human, Mouse, Human skin biopsies, Mouse skin

 <u>A previously unidentified amino-terminal domain regulates transcriptional activity of wild-type and diseaseassociated human GLI2.</u>

Roessler E, Ermilov AN, Grange DK, Wang A, Grachtchouk M, Dlugosz AA, Muenke M. Human Molecular Genetics 2005 Aug; 14(15):2181.

 GLI2 is expressed in normal human epidermis and BCC and induces GLI1 expression by binding to its promoter.

Ikram MS, Neill GW, Regl G, Eichberger T, Frischauf AM, Aberger F, Quinn A, Philpott M.

The Journal of Investigative Dermatology 2004 Jun; 122(6):1503.

Application: WB, Human, Human primary keratinocytes

 The zinc-finger transcription factor GLI2 antagonizes contact inhibition and differentiation of human epidermal cells.

Regl G, Kasper M, Schnidar H, Eichberger T, Neill GW, Ikram MS, Quinn AG, Philpott MP, Frischauf AM, Aberger F. Oncogene 2004 Feb; 23(6):1263.

### Pathway

- <u>Basal cell carcinoma</u>
- <u>Hedgehog signaling pathway</u>
- Pathways in cancer

#### Disease

- Carcinoma
- Cleft Lip
- <u>Cleft Palate</u>

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# **Product Information**

- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Kidney Failure
- <u>Neoplasms</u>
- <u>Recurrence</u>
- Tobacco Use Disorder