Datasheet for ABIN6657595

anti-GLI1 antibody (AA 805-820)

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Overview

Quantity:	25 µL
Target:	GLI1
Binding Specificity:	AA 805-820
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Fluorescence Microscopy (FM)

Product Details

Purpose:	Gli1 Antibody
Immunogen:	The whole rabbit serum was prepared by repeated immunizations with a synthetic peptide corresponding to amino acids 805-820 of mouse Gli-1. The peptide was synthesized as a multiple antigen peptide (MAP).
Isotype:	IgG
Cross-Reactivity (Details):	Reactivity is observed against Mouse and Human Gli-1.
Purification:	This whole rabbit antiserum was prepared by delipidation and defibrination followed by the addition of buffer salts and preservative.
Sterility:	Sterile filtered

Target Details

Target:	GLI1

Target Details

Alternative Name:	Gli1 (GLI1 Products)
Background:	Synonyms: rabbit anti-Gli-1 Antibody, rabbit anti-Gli1 Antibody, Zinc finger protein GLI1 antibody, Glioma-associated oncogene antibody, Oncogene GLI antibody Background: Anti Gli1 Antibody was produced against a peptide corresponding to the carboxy-terminal region of the mouse Gli-1 protein. This region of Gli1 is not conserved among other gli family members, namely Gli-2 and Gli-3. Gli was termed by Kinzler et al. (1987) as 'glioma-associated oncogene' amplified in malignant gliomas. Analysis of the cloned gene demonstrates that the gene contains 5 repeats of zinc-finger sequences, which places Gli in the family of Kruppel (Kr) zinc finger proteins. Northern analysis reveals that Gli is expressed in embryonal carcinoma cells but not in most adult tissue. Gli has been localized to 12q13-q14.3 by Southern blot analysis. In mice, the gene is located on chromosome 10. In mice, three zinc finger transcription factors, Gli-1, Gli-2 and Gli-3, have been implicated in the transduction of Sonic hedgehog (Shh) signal. In papillary epithelium, shh, gli1 and ptc all follow similar expression patterns. Gli-1 expression is central and probably sufficient for tumor development in humans. Gene Name: GLI1
Gene ID:	14632, 4885279
UniProt:	P47806
Pathways:	Hedgehog Signaling, Dopaminergic Neurogenesis

Application Details

Application Notes:	ELISA_Dilution: 1:20,000 - 1:100,000 IF_Microscopy_Dilution: 1:500 - 1:2,000 Western_Blot_Dilution: 1:2,000 - 1:10,000 Other: User Optimized
Comment:	Suggested Applications: ChIP, IHC, IP This antibody has been tested for use in ELISA, Immunofluorescence, and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 120 kDa in size corresponding to Gli-1 protein by western blotting in the appropriate cell lysate or extract. For immunohistochemistry, perform heat mediated antigen retrieval via the microwave method before commencing with staining.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiry Date:	12 months

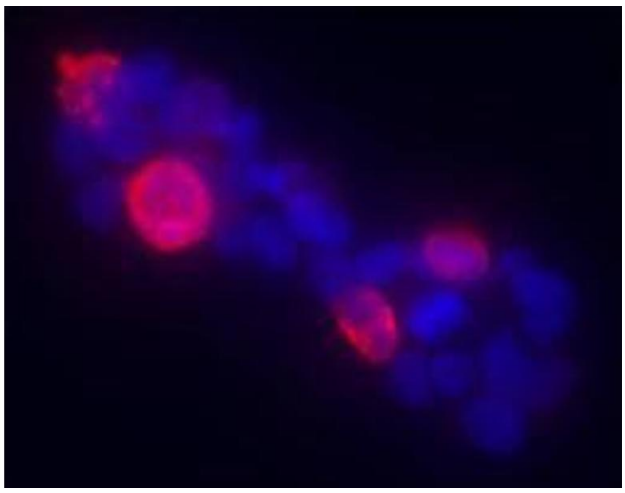
Publications

Product cited in:	Takeuchi, Kito, Itoh, Naruse, Fujikawa, Sadek, Akiyama, Yamashiro, Wakisaka, Abe: "Kruppel-Like Factor 4 represses osteoblast differentiation via ciliary Hedgehog signaling." in: **Experimental cell research**, Vol. 371, Issue 2, pp. 417-425, (2018) (PubMed). Armas-López, Piña-Sánchez, Arrieta, de Alba, Ortiz-Quintero, Santillán-Doherty, Christiani, Zúñiga, Ávila-Moreno: "Epigenomic study identifies a novel mesenchyme homeobox2-GLI1 transcription axis involved in cancer drug resistance, overall survival and therapy prognosis in lung cancer patients." in: **Oncotarget**, Vol. 8, Issue 40, pp. 67056-67081, (2017) (PubMed). Yoon, Lamm, Iannaccone, Higashiyama, Leong, Iannaccone, Walterhouse: "p53 modulates the activity of the GLI1 oncogene through interactions with the shared coactivator TAF9." in: **DNA repair**, Vol. 34, pp. 9-17, (2016) (PubMed). Kotula, Sun, Li, Pratico, Fereshteh, Ahrens, Sullenger, Kovacs: "Targeted disruption of β-arrestin 2-mediated signaling pathways by aptamer chimeras leads to inhibition of leukemic cell growth. " in: **PLoS ONE**, Vol. 9, Issue 4, pp. e93441, (2015) (PubMed).

Publications

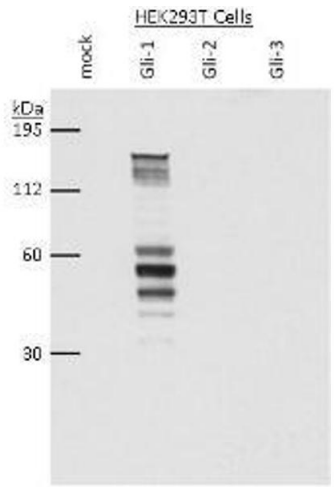
Gurung, Feng, Hua: "Menin directly represses Gli1 expression independent of canonical Hedgehog signaling." in: **Molecular cancer research : MCR**, Vol. 11, Issue 10, pp. 1215-22, (2014) (PubMed).

Images



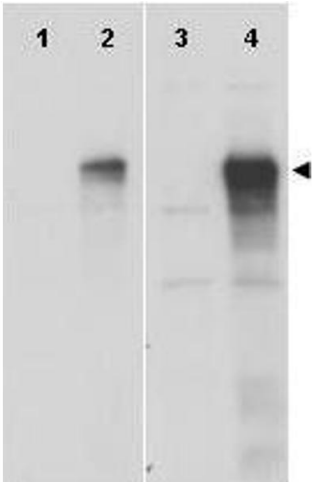
Immunofluorescence

Image 1. Anti-Gli-1 Antibody - Immunofluorescence. Immunofluorescence using anti-Gli-1 antibody shows detection of mouse Gli-1 present in transfected 293T cells (red). HEK293T cells were transiently transfected with Gli-1 (murine). 's Anti-Gli-1 antiserum (rabbit) was added 1:400, followed by a fluorescent labeled anti-rabbit IgG secondary. Personal communication, Tom Curran, Children's Hospital of Philadelphia, Philadelphia, PA.



Western Blotting

Image 2. Western Blot - Gli1 Antibody Western blot using anti-Gli-1 antibody shows detection of a band at ~150 kDa (arrowhead) corresponding to human Gli-1 present in transfected 293T cell lysates (lanes 2 and 4). Mock 293T cell lysates with vector only show no staining (lanes 1 and 3). Lysates were separated by SDS-PAGE and transferred to nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:8,000 (lanes 1 and 2) or 1:4,000 (lanes 3 and 4). Molecular weight estimation was made by comparison to MW markers. Personal communication, Hiro Kimura, St. Jude Children's Research Hospital, Memphis, TN.



Western Blotting

Image 3. Anti-Gli-1 Antibody - Western Blot. Western blot using Anti-Gli-1 antibody shows detection of a band at ~150 kDa (arrowhead) corresponding to human Gli-1 present in transfected 293T cell lysates (lanes 2 and 4). Mock 293T cell lysates with vector only show no staining (lanes 1 and 3). Lysates were separated by SDS-PAGE and transferred to nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:8,000 (lanes 1 and 2) or 1:4,000 (lanes 3 and 4). Molecular weight estimation was made by comparison to MW markers. Personal communication, Hiro Kimura, St. Jude Children's Research Hospital, Memphis, TN.

