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# GLI-1 Polyclonal Antibody

Catalog # AP74256

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | P08151 |
| **Reactivity** | Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 117904 |

## Additional Information

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| **Gene ID** | 2735 |
| **Other Names** | Zinc finger protein GLI1 (Glioma-associated oncogene) (Oncogene GLI) |
| **Dilution** | WB~~WB 1:500-2000, ELISA 1:10000-20000 E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

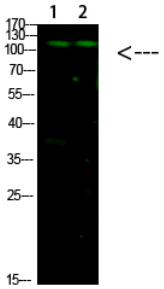
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| **Name** | GLI1 {ECO:0000303\|PubMed:19706761, ECO:0000312\|HGNC:HGNC:4317} |
| **Function** | Transcription activator that acts as a key effector of the smoothened signaling pathway, and which plays a role in craniofacial development and digital development, as well as development of the central nervous system and gastrointestinal tract (PubMed:10806483, PubMed:11238441, PubMed:19706761, PubMed:19878745, PubMed:24076122, PubMed:24217340, PubMed:24311597, PubMed:28973407). Binds to the DNA consensus sequence 5'-GACCACCCA-3' (PubMed:2105456, PubMed:24217340, PubMed:2832761, PubMed:8378770). Activated in response to smoothened signaling: in presence of hedgehog (DHH, IHH or SHH) and subsequent activation of smoothened, GLI1 translocates to the nucleus and promotes expression of target genes (PubMed:2105456). In contrast to GLI2 and GLI3, does not contain a repressor domain and only acts as a transcription activator (PubMed:10075717). |
| **Cellular Location** | Cytoplasm. Nucleus. Cell projection, cilium {ECO:0000250\|UniProtKB:P47806}. Note=Sequestered in the cytoplasm by SUFU in absence of smoothened signaling (PubMed:10806483, PubMed:10559945). Accumulates in primary cilia following smoothened activation (By similarity). It then translocates to the nucleus, where is activates |

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| | transcription of target genes (PubMed:10806483, PubMed:24311597, PubMed:35831023). Activation and translocation to the nucleus is promoted by interaction with STK36 (PubMed:10806483). Phosphorylation by ULK3 may promote nuclear localization (PubMed:19878745). Translocation to the nucleus is promoted by interaction with ZIC1 (PubMed:11238441) {ECO:0000250\|UniProtKB:P47806, ECO:0000269\|PubMed:10559945, ECO:0000269\|PubMed:10806483, ECO:0000269\|PubMed:11238441, ECO:0000269\|PubMed:19878745, ECO:0000269\|PubMed:24311597, ECO:0000269\|PubMed:35831023} |
| **Tissue Location** | Detected in testis (at protein level) (PubMed:2105456). Testis, myometrium and fallopian tube. Also expressed in the brain with highest expression in the cerebellum, optic nerve and olfactory tract (PubMed:19878745). Isoform 1 is detected in brain, spleen, pancreas, liver, kidney and placenta; isoform 2 is not detectable in these tissues (PubMed:19706761) |

## Background

Acts as a transcriptional activator (PubMed: 19706761, PubMed:10806483, PubMed:19878745, PubMed:24311597, PubMed:24217340). Binds to the DNA consensus sequence 5'- GACCACCCA-3' (PubMed:2105456, PubMed:8378770, PubMed:24217340). May regulate the transcription of specific genes during normal development (PubMed:19706761). May play a role in craniofacial development and digital development, as well as development of the central nervous system and gastrointestinal tract. Mediates SHH signaling (PubMed:19706761). Plays a role in cell proliferation and differentiation via its role in SHH signaling (Probable).

## Images




Western Blot analysis of 1,mouse-liver 2,hela cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody：Goat Anti-rabbit IgG IRDye 800( diluted at 1:5000, 25°C, 1 hour)

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