



## Anti-Gli1 (RABBIT) Antibody - 100-401-223

**Code:** 100-401-223

**Size:** 100 µL

**Product Description:** Anti-Gli1 (RABBIT) Antibody - 100-401-223

**Concentration:** 75 mg/mL by Refractometry

**PhysicalState:** Liquid (sterile filtered)

|                               |  |
|-------------------------------|--|
| <b>Label</b>                  | Unconjugated   |
| <b>Host</b>                   | Rabbit   |
| <b>Gene Name</b>              | GLI1   |
| <b>Species Reactivity</b>     | mouse, human   |
| <b>Buffer</b>                 | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2   |
| <b>Stabilizer</b>             | None   |
| <b>Preservative</b>           | 0.01% (w/v) Sodium Azide   |
| <b>Storage Condition</b>      | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.  |
| <b>Synonyms</b>               | rabbit anti-Gli-1 Antibody, rabbit anti-Gli1 Antibody, Zinc finger protein GLI1 antibody, Glioma-associated oncogene antibody, Oncogene GLI antibody   |
| <b>Application Note</b>       | 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.  |
| <b>Background</b>             | 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. |
| <b>Purity And Specificity</b> | This whole rabbit antiserum was prepared by delipidation and defibrination followed by the addition of buffer salts and preservative. Reactivity is observed against Mouse and Human Gli-1. Cross-reactivity with other species is likely but has not been determined. No reaction occurs with human or mouse Gli-2 or Gli-3.  |
| <b>Assay Dilutions</b>        | User Optimized   |
| <b>ELISA</b>                  | 1:20,000 - 1:100,000   |
| <b>Western Blot</b>           | 1:2,000 - 1:10,000   |
| <b>Immunohistochemistry</b>   | 1:500 - 1:2,000  |
| <b>IF Microscopy</b>          | 1:500 - 1:2,000  |
| <b>Other Assays</b>           | User Optimized   |
| <b>Expiration</b>             | Expiration date is one (1) year from date of opening.  |
| <b>Immunogen</b>              | 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).   |

## General Reference

- Hall, J.M., Hooper, J.E., Finger, T.E. (1999) Expression of sonic hedgehog, patched, and gli1 in developing taste papillae of the mouse. *J. Comp. Neurol.* 406(2):143-155.
- Park, H. L. et. al. (2000) Mouse Gli1 mutants are viable but have defects in SHH signaling in combination with a Gli2 mutation. *Development* 127(8): 1593-1605.
- Kinzler, K.W. et. al. (1987) Identification of an amplified, highly expressed gene in a human glioma. *Science* 236:70-73.

## Specific Reference

- Wetmore, C., Eberhardt, D. and Curran, T. (2000) The normal patched allele is expressed in medulloblastomas from mice with heterozygous germline mutation of patched. *Cancer Res.* 60(8): 2239-2246.
- Qualtrough D et al. (2004) Hedgehog signalling in colorectal tumour cells: induction of apoptosis with cyclopamine treatment. *Int J Cancer* 110:831-7.
- Niemann C et al. (2003) Indian hedgehog and beta-catenin signaling: role in the sebaceous lineage of normal and neoplastic mammalian epidermis. *Proc Natl Acad Sci U S A* 100 Suppl 1:11873-80.

## Related Products

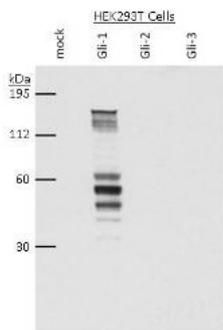
|             |  |
|-------------|--|
| 100-401-149 | Anti-EGFR (RABBIT) Antibody - 100-401-149                              |
| 600-401-928 | Anti-EGFR pY1197 (RABBIT) Antibody - 600-401-928                       |
| 611-1302    | Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302 |
| B501-0500   | BLOTTO Immunoanalytical Grade (Non-Fat Dry Milk) - B501-0500           |

## Related Links

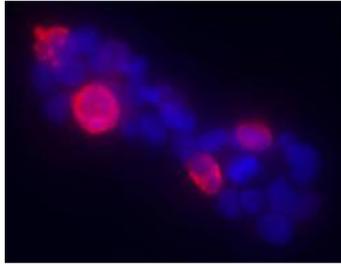
|   |   |
|---|---|
|   | UniProtKB - P47806  |
| <a href="http://www.uniprot.org/uniprot/P47806">http://www.uniprot.org/uniprot/P47806</a> |   |
| NCBI - 4885279  | <a href="http://www.ncbi.nlm.nih.gov/protein/4885279">http://www.ncbi.nlm.nih.gov/protein/4885279</a>   |
|   | GeneID - 2735   |
| <a href="http://www.ncbi.nlm.nih.gov/gene/2735">http://www.ncbi.nlm.nih.gov/gene/2735</a> |   |
| GeneID - 14632  | <a href="http://www.ncbi.nlm.nih.gov/sites/entrez?db=gene&amp;term=14632">http://www.ncbi.nlm.nih.gov/sites/entrez?db=gene&amp;term=14632</a> |

## Images

- 1 Western blot using Rockland's 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.

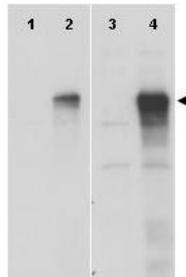


- 2 Immunofluorescence using Rockland's anti-Gli-1 antibody shows detection of mouse Gli-1 present in transfected 293T cells (red). HEK293T cells were transiently transfected with Gli-1 (murine). Rockland's Anti-Gli-1 antiserum (rabbit) was added 1:400, followed by a fluorescent labeled anti-rabbit IgG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



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Western blot using Rockland's 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.



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