Datasheet for ABIN129623

anti-GLI3 antibody (AA 41-57)

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Overview

Quantity:	100 µg
Target:	GLI3
Binding Specificity:	AA 41-57
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GLI3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	This affinity purified antibody was produced from monospecific rabbit serum by repeated immunizations with a synthetic peptide corresponding to amino acids 41-57 of human Gli-3 protein.
Isotype:	IgG
Cross-Reactivity:	Chimpanzee, Squirrel Monkey (Saimiri spec.), Xenopus laevis, Chicken, Dog (Canine), Quail
Characteristics:	Concentration Definition: by UV absorbance at 280 nm

Target Details

Target:	GLI3
Alternative Name:	Gli-3 (GLI3 Products)

Target Details

Background:	Gli-3 (also known as Zinc Finger Protein Gli-3 or GLI-Kruppel family member GLI-3) belongs to the GLI C2H2-type zinc-finger protein family and contains 5 C2H2-type zinc fingers. Gli-3 is very important for normal limb and brain development and is implicated in the transduction of Shh signal. Gli-3 is a nuclear protein expressed in a wide variety of normal adult tissues, including lung, colon, spleen, placenta, testis, and myometrium. Defects in Gli-3 are the cause of Greig cephalo-poly-syndactyly syndrome (GCPS); an autosomal dominant disorder-affecting limb and cranio-facial development. Two isoforms of human Gli-3 have been reported. One is the full-length protein at ~170-190kDa and the other is a truncated isoform at ~80kDa. Synonyms: Gli-3, Zinc Finger Protein Gli-3, GLI-Kruppel family member GLI-3
Gene ID:	2737, 119393899
UniProt:	P10071
Pathways:	Hedgehog Signaling

Application Details

Application Notes:	This antibody has been tested for use in ELISA, immunohistochemistry and western blot. Specific conditions for reactivity should be optimized by the end user. Detection of Gli-3 by western blot may be enhanced if nuclear extracts are used instead of whole cell lysates as the expression/abundance of Gli-3 is likely to be low. Furthermore, Gli3 expression is likely to be developmentally regulated and induced, making it difficult to detect in whole tissue homogenates.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
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

Publications

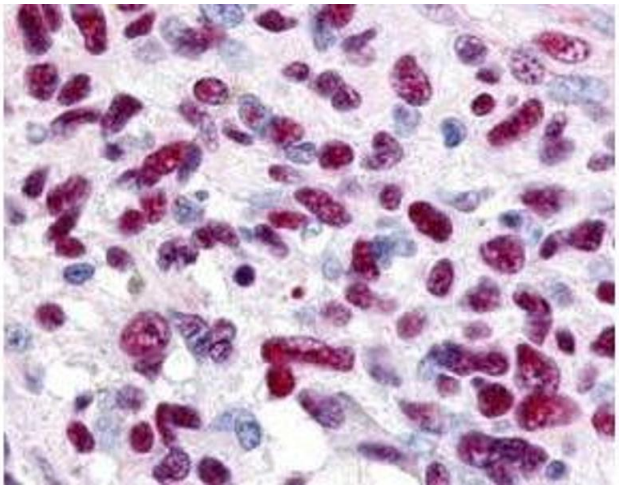
Product cited in:

Welc, Flores, Wehling-Henricks, Ramos, Wang, Bertoni, Tidball: "Targeting a therapeutic LIF transgene to muscle via the immune system ameliorates muscular dystrophy." in: **Nature communications**, Vol. 10, Issue 1, pp. 2788, (2019) (PubMed).

Finno, Gianino, Perumbakkam, Williams, Bordbari, Gardner, Burns, Peng, Durward-Akhurst, Valberg: "A missense mutation in MYH1 is associated with susceptibility to immune-mediated myositis in Quarter Horses." in: **Skeletal muscle**, Vol. 8, Issue 1, pp. 7, (2018) (PubMed).

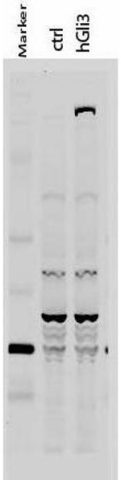
Huang, Ge, Izzi, Greenspan: "α3 Chains of type V collagen regulate breast tumour growth via glypican-1." in: **Nature communications**, Vol. 8, pp. 14351, (2018) (PubMed).

Images



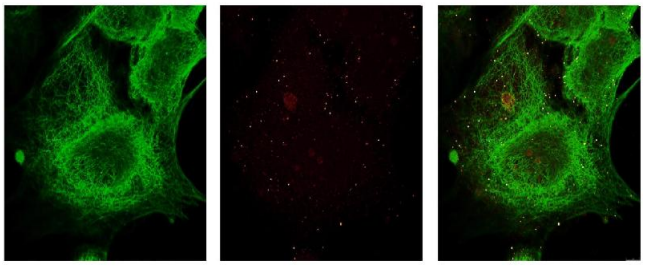
Immunohistochemistry

Image 1. Immunohistochemistry of Rabbit anti-Gli-3 antibody. This image tissue: human glioblastoma. Specific staining was also noted in tissue from adrenal, brain, glioblastoma, colon, heart, kidney, lung, liver, skeletal muscle, ovary, pancreas, placenta, skin, spleen, stomach, testes, thymus, thyroid, tonsil and uterus. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Gli-3 antibody at 0.625 µg/ml for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Gli-3 is nuclear and smooth muscle. Staining: Gli-3 as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blotting

Image 2. Western Blot of Rabbit anti-Gli-3 antibody. Lane 1: 50 kDa molecular weight marker. Lane 2: 293T cells transfected with CrkL-Flag. Lane 3: 293T cells transfected with human Gli-3. Load: 35 µg per lane. Primary antibody: Gli-3 antibody at 1:400 for overnight at 4°C. Secondary antibody: rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 170-190 kDa for hGli-3. Other band(s): Non specific background ~60kDa.



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Immunohistochemistry. antibodies-online's Affinity Purified anti-Human Gli-3 antibody was used at a 0.625 ug/ml to detect Gli-3 in a variety of tissues. Strong nuclear and smooth muscle staining was noted to be consistent with previously published reports. Specific staining was noted in tissue from adrenal, brain, glioblastoma, colon, heart, kidney, lung, liver, skeletal muscle, ovary, pancreas, placenta, skin, spleen, stomach, testes, thymus, thyroid, tonsil and uterus. This image shows Gli-3 staining of human glioblastoma. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.