

# GLI-3 (C-20): sc-6154

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. GLI-3 (GLI family zinc finger 3), also known as GLI3FL (GLI3 full length protein), PHS, ACLS, GCPS, PAPA, PAPB, PAPA1 or PPDIV, is a 1,580 amino acid nuclear and cytoplasmic protein that acts as both a transcriptional activator and a repressor of the Sonic hedgehog (Shh) pathway. A member of the GLI C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family, GLI-3 is encoded by a gene that maps to human chromosome 7p14.1. Defects in the GLI-3 gene are the cause of a disorder known as Greig cephalo-poly-syndactyly syndrome (GCPS), which affects limb and craniofacial development.

## CHROMOSOMAL LOCATION

Genetic locus: GLI3 (human) mapping to 7p14.1; Gli3 (mouse) mapping to 13 A1.

## SOURCE

GLI-3 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GLI-3 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6154 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-6154 X, 200 µg/0.1 ml.

## APPLICATIONS

GLI-3 (C-20) is recommended for detection of GLI-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GLI-3 siRNA (h): sc-35483, GLI-3 siRNA (m): sc-35484, GLI-3 shRNA Plasmid (h): sc-35483-SH, GLI-3 shRNA Plasmid (m): sc-35484-SH, GLI-3 shRNA (h) Lentiviral Particles: sc-35483-V and GLI-3 shRNA (m) Lentiviral Particles: sc-35484-V.

GLI-3 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

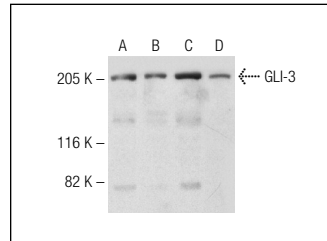
Molecular Weight of GLI-3: 190 kDa.

Positive Controls: Y79 cell lysate: sc-2240, K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



GLI-3 (C-20): sc-6154. Western blot analysis of GLI-3 expression in K-562 (A), Jurkat (B), Y79 (C) and SK-N-MC (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Dai, P., et al. 1999. Sonic Hedgehog-induced activation of the Gli1 promoter is mediated by GLI3. *J. Biol. Chem.* 274: 8143-8152.
2. Mizugishi, K., et al. 2001. Molecular properties of Zic proteins as transcriptional regulators and their relationship to GLI proteins. *J. Biol. Chem.* 276: 2180-2188.
3. Jaskoll, T., et al. 2004. Sonic hedgehog signaling plays an essential role during embryonic salivary gland epithelial branching morphogenesis. *Dev. Dyn.* 229: 722-732.
4. Clement, C.A., et al. 2009. The primary cilium coordinates early cardiogenesis and hedgehog signaling in cardiomyocyte differentiation. *J. Cell Sci.* 122: 3070-3082.
5. Bai, X.Y., et al. 2013. High expression of truncated GLI3 is associated with poor overall survival in patients with non-small cell lung cancer. *Cancer Biomark.* 13: 37-47.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


 MONOS  
Satisfaction  
Guaranteed

Try **GLI-3 (B-4): sc-74478**, our highly recommended monoclonal alternative to GLI-3 (C-20).