SANTA CRUZ BIOTECHNOLOGY, INC.

DGS8 (H-6): sc-271259

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DGS8, also designated DiGeorge syndrome critical region 8 protein, plays a role in the etiology of the velocardiofacial/DiGeorge syndrome (VCFS/DGS). It is a ubiquitously expressed protein encoded by the gene DGCR8, which is deleted in DiGeorge syndrome. DiGeorge syndrome is characterized by structural and functional palate anomalies, conotruncal cardiac malformations, immunodeficiency, hypocalcemia and typical facial anomalies. In mouse, DGS8 is detected primarily in embryonic brain, vessels, thymus and palate.

REFERENCES

1. Shiohama, A., et al. 2003. Molecular cloning and expression analysis of a novel gene DGCR8 located in the DiGeorge syndrome chromosomal region. Biochem. Biophys. Res. Commun. 304: 184-190.
2. Baldini, A. 2004. DiGeorge syndrome: an update. Curr. Opin. Cardiol. 19: 201-204.
3. Han, J., et al. 2004. The Drosha-DGCR8 complex in primary microRNA processing. Genes Dev. 18: 3016-3027.
4. Landthaler, M., et al. 2004. The human DiGeorge syndrome critical region gene 8 and its *D. melanogaster* homolog are required for miRNA biogenesis. Curr. Biol. 14: 2162-2167.
5. Goldmuntz, E. 2005. DiGeorge syndrome: new insights. Clin. Perinatol. 32: 963-978.
6. Gregory, R.I. and Shiekhattar, R. 2005. MicroRNA biogenesis and cancer. Cancer Res. 65: 3509-3512.
7. Driscoll, D.A. 2006. Molecular and genetic aspects of DiGeorge/velocardiofacial syndrome. Methods Mol. Med. 126: 43-55.

CHROMOSOMAL LOCATION

Genetic locus: DGCR8 (human) mapping to 22q11.21.

SOURCE

DGS8 (H-6) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of DGS8 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-271259 X, 200 µg/0.1 ml.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

DGS8 (H-6) is recommended for detection of DGS8 isoforms 1, 2 and 3 of human origin by Western Blotting (starting dilution 1:100, 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 DGS8 siRNA (h): sc-60529, DGS8 shRNA Plasmid (h): sc-60529-SH and DGS8 shRNA (h) Lentiviral Particles: sc-60529-V.

DGS8 (H-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

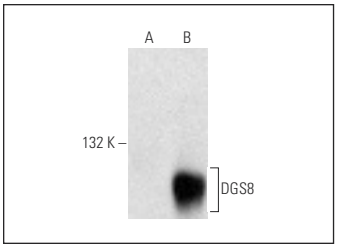
Molecular Weight of DGS8: 120 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, DGS8 (h): 293T Lysate: sc-117436 or Jurkat whole cell lysate: sc-2204.

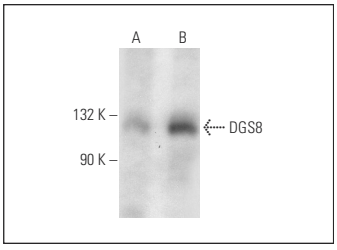
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



DGS8 (H-6): sc-271259. Western blot analysis of DGS8 expression in non-transfected: sc-117752 (**A**) and human DGS8 transfected: sc-117436 (**B**) 293T whole cell lysates.



DGS8 (H-6): sc-271259. Western blot analysis of DGS8 expression in HeLa (**A**) and Jurkat (**B**) whole cell lysates.

RESEARCH USE

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