

DGS8 (E-10): sc-377249

BACKGROUND

DGS8, also designated DiGeorge syndrome critical region 8 protein, plays a role in the etiology of the velocardiofacial/DiGeorge syndrome (VCF/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

- 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.
- Baldini, A. 2004. DiGeorge syndrome: an update. *Curr. Opin. Cardiol.* 19: 201-204.
- Han, J., et al. 2004. The Drosha-DGCR8 complex in primary microRNA processing. *Genes Dev.* 18: 3016-3027.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: DGCR8 (human) mapping to 22q11.21; Dgcr8 (mouse) mapping to 16 A3.

SOURCE

DGS8 (E-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 49-85 near the N-terminus of DGS8 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ 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-377249 X, 200 µg/0.1 ml.

DGS8 (E-10) is available conjugated to agarose (sc-377249 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377249 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377249 PE), fluorescein (sc-377249 FITC), Alexa Fluor® 488 (sc-377249 AF488), Alexa Fluor® 546 (sc-377249 AF546), Alexa Fluor® 594 (sc-377249 AF594) or Alexa Fluor® 647 (sc-377249 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377249 AF680) or Alexa Fluor® 790 (sc-377249 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377249 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

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

APPLICATIONS

DGS8 (E-10) is recommended for detection of DGS8 isoforms 1, 2 and 3 of mouse, rat and 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 siRNA (m): sc-60530, DGS8 shRNA Plasmid (h): sc-60529-SH, DGS8 shRNA Plasmid (m): sc-60530-SH, DGS8 shRNA (h) Lentiviral Particles: sc-60529-V and DGS8 shRNA (m) Lentiviral Particles: sc-60530-V.

DGS8 (E-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

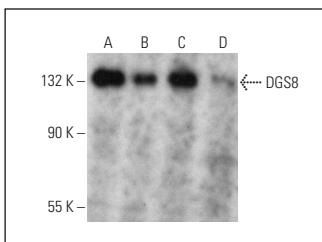
Molecular Weight of DGS8: 120 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242, HuT 78 whole cell lysate: sc-2208 or Jurkat whole cell lysate: sc-2204.

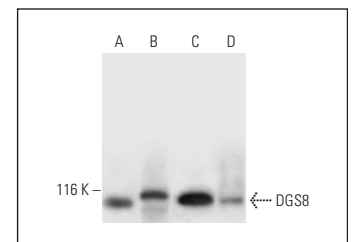
RECOMMENDED SUPPORT REAGENTS

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 (E-10): sc-377249. Western blot analysis of DGS8 expression in Jurkat (A), MDA-MB-231 (B), MCF7 (C) and NIH/3T3 (D) whole cell lysates.



DGS8 (E-10): sc-377249. Western blot analysis of DGS8 expression in Jurkat (A), CTLL-2 (B), HuT 78 (C) and H9 (D) whole cell lysates.

SELECT PRODUCT CITATIONS

- Hou, Y., et al. 2023. METTL14 modulates glycolysis to inhibit colorectal tumorigenesis in p53-wild-type cells. *EMBO Rep.* E-published.

RESEARCH USE

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