SANTA CRUZ BIOTECHNOLOGY, INC.

DGCR14 (F-8): sc-398528

BACKGROUND

DGCR14 (DiGeorge syndrome critical region 14, ES2 protein) is a 476 amino acid nuclear protein that belongs to the DGCR14 family. DGCR14 is believed to play a part in the etiology of the velocardiofacial/DiGeorge syndrome (VCFS/DGS), a developmental disorder characterized by structural and functional palate anomalies, conotruncal cardiac malformations, immunodeficiency, hypocalcemia, and typical facial anomalies. Most cases result from a deletion of chromosome 22q11.21 (DiGeorge syndrome chromosome region, or DGCR). This protein localizes to the nucleus and co-purifies with C complex spliceosomes.

REFERENCES

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5. Wakamiya, M., Lindsay, E.A., Rivera-Perez, J.A., Baldini, A. and Behringer, R.R. 1998. Functional analysis of Gscl in the pathogenesis of the DiGeorge and velocardiofacial syndromes. Hum. Mol. Genet. 7: 1835-1840.
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CHROMOSOMAL LOCATION

Genetic locus: DGCR14 (human) mapping to 22q11.21; Dgcr14 (mouse) mapping to 16 A3.

SOURCE

DGCR14 (F-8) is a mouse monoclonal antibody raised against amino acids 177-476 mapping at the C-terminus of DGCR14 of human origin.

RESEARCH USE

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

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.

APPLICATIONS

DGCR14 (F-8) is recommended for detection of DGCR14 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 DGCR14 siRNA (h): sc-77137, DGCR14 siRNA (m): sc-143022, DGCR14 shRNA Plasmid (h): sc-77137-SH, DGCR14 shRNA Plasmid (m): sc-143022-SH, DGCR14 shRNA (h) Lentiviral Particles: sc-77137-V and DGCR14 shRNA (m) Lentiviral Particles: sc-143022-V.

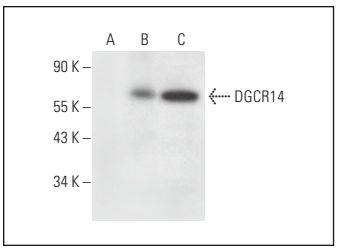
Molecular Weight of DGCR14: 53 kDa.

Positive Controls: DGCR14 (h3): 293T Lysate: sc-174407 or K-562 whole cell lysate: sc-2203.

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



DGCR14 (F-8): sc-398528. Western blot analysis of DGCR14 expression in non-transfected 293T: sc-117752 (**A**), human DGCR14 transfected 293T: sc-174407 (**B**) and K-562 (**C**) whole cell lysates.

STORAGE

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