SANTA CRUZ BIOTECHNOLOGY, INC.

DGCR6 (Q-20): sc-55092

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Neural crest cell migration to the third and fourth pharyngeal pouches is a critical step in the structural formation of organs that are affected in DiGeorge syndrome. DGCR6 (DiGeorge syndrome critical region 6) is a nuclear protein that plays a role in neural crest cell migration and is located at the DiGeorge syndrome critical region (DGCR) on chromosome 22. Expressed ubiquitously with highest levels in heart, liver and skeletal muscle, DGCR6 shares high homology with the Drosophila gonadal (gdl) protein and with human Laminin γ-1, both of which are involved in early tissue development. The gene encoding DGCR6, along with other DGCR genes, is deleted in DiGeorge syndrome; a developmental disorder characterized by improper facial, cardiac and palate formation. Upregulation of DGCR6 is implicated in lung and colon adenocarcinomas, as well as in Burkitt's lymphoma and lymphocytes transformed by EBV. Due to a duplication of the ancestral DGCR6 locus, there are two functional, highly homologous copies of the DGCR6 gene (designated DGCR6 and DGCR6L) on chromosome 22.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DGCR6/DGCR6L (human) mapping to 22q11.21; Dgcr6 (mouse) mapping to 16 A3.

SOURCE

DGCR6 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DGCR6 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-55092 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DGCR6 (Q-20) is recommended for detection of DGCR6 and DGCR6L of human origin, and DGCR6 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

DGCR6 (Q-20) is also recommended for detection of DGCR6 and DGCR6L of human origin, and DGCR6 of mouse origin in additional species, including canine, bovine and avian.

Suitable for use as control antibody for DGCR6 siRNA (m): sc-62209, DGCR6 shRNA Plasmid (m): sc-62209-SH and DGCR6 shRNA (m) Lentiviral Particles: sc-62209-V.

Molecular Weight of DGCR6: 25 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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