

DGCR14 (E-17): sc-86411

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 (VCF/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

1. Rizzu, P., et al. 1996. Cloning and comparative mapping of a gene from the commonly deleted region of DiGeorge and Velocardiofacial syndromes conserved in *C. elegans*. *Mamm. Genome* 7: 639-643.
2. Gong, W., et al. 1997. Structural and mutational analysis of a conserved gene (DGS1) from the minimal DiGeorge syndrome critical region. *Hum. Mol. Genet.* 6: 267-276.

CHROMOSOMAL LOCATION

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

SOURCE

DGCR14 (E-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of DGCR14 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86411 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DGCR14 (E-17) is recommended for detection of DGCR14 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); non cross-reactive with DGCR2 and DGCR6.

DGCR14 (E-17) is also recommended for detection of DGCR14 in additional species, including equine, canine, bovine and porcine.

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.

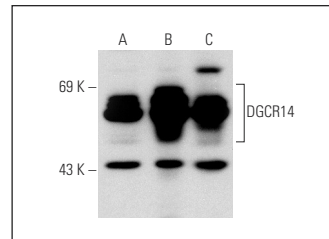
Molecular Weight of DGCR14: 53 kDa.

Positive Controls: DGCR14 (h2): 293T Lysate: sc-128453 or K-562 whole cell lysate: sc-2203.

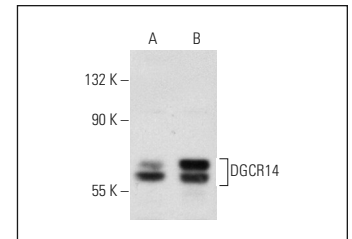
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



DGCR14 (E-17): sc-86411. 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.



DGCR14 (E-17): sc-86411. Western blot analysis of DGCR14 expression in non-transfected: sc-117752 (A) and human DGCR14 transfected: sc-128453 (B) 293T 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.

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.

MONOS
Satisfaction
Guaranteed

Try **DGCR14 (C-9): sc-398472** or **DGCR14 (F-8): sc-398528**, our highly recommended monoclonal alternatives to DGCR14 (E-17).