

DIRC1 (K-14): sc-167628

BACKGROUND

DIRC1 (disrupted in renal carcinoma protein 1) is a 104 amino acid protein expressed in adult prostate, ovary, testis and placenta, and fetal kidney, skeletal muscle and spleen. A chromosomal translocation in the DIRC1 gene, which maps to human chromosome 2q32.2, is the cause of familial renal cell carcinoma type 1 (RCC1). Chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene.

REFERENCES

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8. Meienberg, J., et al. 2010. Hemizygous deletion of COL3A1, COL5A2, and MSTN causes a complex phenotype with aortic dissection: a lesson for and from true haploinsufficiency. *Eur. J. Hum. Genet.* 18: 1315-1321.

CHROMOSOMAL LOCATION

Genetic locus: DIRC1 (human) mapping to 2q32.2.

SOURCE

DIRC1 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DIRC1 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-167628 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DIRC1 (K-14) is recommended for detection of DIRC1 of human 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); non cross-reactive with DIRC2 or DIRC3.

Suitable for use as control antibody for DIRC1 siRNA (h): sc-94878, DIRC1 shRNA Plasmid (h): sc-94878-SH and DIRC1 shRNA (h) Lentiviral Particles: sc-94878-V.

Molecular Weight of DIRC1: 11 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.