DSCR 8 (E-16): sc-323801



The Power to Question

BACKGROUND

An extra copy of chromosome 21, the smallest human autosome chromosome, results in Down syndrome. Down syndrome is a genetic disorder characterized by congenital heart abnormalities and mental retardation. The Down syndrome critical region (DSCR) maps specifically to chromosme 21q22.13 and includes several genes which are likely associated with the pathogenesis of Down syndrome. Symptoms of Down syndrome include abnormal neuronal differentiation and elevated apoptosis in the developing brain. DSCR 8 (Down syndrome critical region protein 8), also known as MTAG2, MMA1 malignant melanoma-associated protein 1) or cancer/testis antigen 25 (CT25), is a 97 amino acid protein expressed in numerous tissues except heart, breast, liver and small intestine. DSCR 8 is expressed as four isoforms produced by alternative splicing events.

REFERENCES

- Dahmane, N., Ghezala, G.A., Gosset, P., Chamoun, Z., Dufresne-Zacharia, M.C., Lopes, C., Rabatel, N., Gassanova-Maugenre, S., Chettouh, Z., Abramowski, V., Fayet, E., Yaspo, M.L., Korn, B., Blouin, J.L., Lehrach, H., Poutska, A., Antonarakis, S.E., Sinet, P.M., Creau, N. and Delabar, J.M. 1998. Transcriptional map of the 2.5-Mb CBR-ERG region of chromosome 21 involved in Down syndrome. Genomics 48: 12-23.
- 2. Toyoda, A., Noguchi, H., Taylor, T.D., Ito, T., Pletcher, M.T., Sakaki, Y., Reeves, R.H. and Hattori, M. 2002. Comparative genomic sequence analysis of the human chromosome 21 Down syndrome critical region. Genome Res. 12: 1323-1332.
- Reymond, A., Camargo, A.A., Deutsch, S., Stevenson, B.J., Parmigiani, R.B., Ucla, C., Bettoni, F., Rossier, C., Lyle, R., Guipponi, M., de Souza, S., Iseli, C., Jongeneel, C.V., Bucher, P., Simpson, A.J. and Antonarakis, S.E. 2002. Nineteen additional unpredicted transcripts from human chromosome 21. Genomics 79: 824-832.
- 4. de Wit, N.J., Weidle, U.H., Ruiter, D.J. and van Muijen, G.N. 2002. Expression profiling of MMA-1a and splice variant MMA-1b: new cancer/testis antigens identified in human melanoma. Int. J. Cancer 98: 547-553.
- de Wit, N.J., Cornelissen, I.M., Diepstra, J.H., Weidle, U.H., Ruiter, D.J. and van Muijen, G.N. 2005. The MMA1 gene family of cancer-testis antigens has multiple alternative splice variants: characterization of their expression profile, the genomic organization, and transcript properties. Genes Chromosomes Cancer 42: 10-21.

CHROMOSOMAL LOCATION

Genetic locus: DSCR8 (human) mapping to 21q22.13.

SOURCE

DSCR 8 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DSCR 8 of human origin.

STORAGE

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

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-323801 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DSCR 8 (E-16) is recommended for detection of DSCR 8 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 other DSCR family members.

Molecular Weight of DSCR 8 isoforms: 11/10/8/4 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.

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.

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