

DSCR 1 (34-A): sc-130370

BACKGROUND

DSCR1 (down syndrome critical region 1), also known as Calcipressin-1, Adapt78, MCIP1 (myocyte-enriched calcineurin-interacting protein 1) or regulator of calcineurin 1, is a 252 amino acid protein that belongs to the RCAN family and exists as 4 alternatively spliced isoforms. Abundantly expressed in skeletal muscle, brain and heart, DSCR 1 is thought to influence cardiac and nervous system development. Overexpression of DSCR1 may play a role in the pathogenesis of Down syndrome. DSCR1 interacts with Raf-1 and has been observed to inhibit calcineurin-dependent transcriptional responses by binding to the catalytic domain of calcineurin A. The gene encoding DSCR 1 maps to human chromosome 21, which houses approximately 300 genes and comprises nearly 1.5% of the human genome. Chromosome 21-associated disorders include Alzheimer's disease, amyotrophic lateral sclerosis and, most notably, Down syndrome (also known as trisomy 21).

REFERENCES

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8. Robakis, N.K. 2006. The discovery and mapping to chromosome 21 of the Alzheimer's amyloid gene: history revised. *J. Alzheimers Dis.* 10: 453-455.
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CHROMOSOMAL LOCATION

Genetic locus: RCAN1 (human) mapping to 21q22.12.

SOURCE

DSCR 1 (34-A) is a mouse monoclonal antibody raised against recombinant DSCR 1 of human origin.

PRODUCT

Each vial contains 200 μ l ascites containing IgG₁ kappa light chain with < 0.1% sodium azide.

APPLICATIONS

DSCR 1 (34-A) is recommended for detection of DSCR 1 of human origin by Western Blotting (starting dilution: to be determined by researcher, dilution range 1:100-1:5000) and immunoprecipitation [1-2 μ l per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for DSCR 1 siRNA (h): sc-45480, DSCR 1 shRNA Plasmid (h): sc-45480-SH and DSCR 1 shRNA (h) Lentiviral Particles: sc-45480-V.

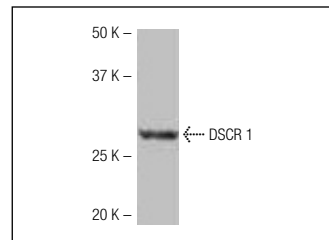
Molecular Weight of DSCR 1: 28 kDa.

Positive Controls: COLO 320 HSR whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



DSCR 1 (34-A): sc-130370. Western blot analysis of DSCR 1 expression in COLO 320 HSR whole cell lysate.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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

PROTOCOLS

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