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DSCR1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6315c

Product Information

Application	WB, E
Primary Accession	P53805
Other Accession	Q6IN33, Q9JHG6, O35847, Q3ZBP4, Q7Z555
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Hamster, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	28079
Antigen Region	222-252

Additional Information

Gene ID	1827
Other Names	Calcipressin-1, Adapt78, Down syndrome critical region protein 1, Myocyte-enriched calcineurin-interacting protein 1, MCIP1, Regulator of calcineurin 1, RCAN1, ADAPT78, CSP1, DSC1, DSCR1
Target/Specificity	This RCAN1/DSCR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 222-252 amino acids from the C-terminal region of human DSCR1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DSCR1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RCAN1
Synonyms	ADAPT78, CSP1, DSC1, DSCR1

Function	Inhibits calcineurin-dependent transcriptional responses by binding to the catalytic domain of calcineurin A (PubMed:12809556). Could play a role during central nervous system development (By similarity).
Tissue Location	Highly expressed heart, brain and skeletal muscle. Also expressed in all other tissues

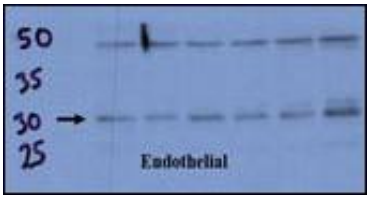
Background

DSCR1 interacts with calcineurin A and inhibits calcineurin-dependent signaling pathways, possibly affecting central nervous system development. The gene for this protein is located in the minimal candidate region for the Down syndrome phenotype, and is overexpressed in the brain of Down syndrome fetuses. Chronic overexpression of DSCR1 may lead to neurofibrillary tangles such as those associated with Alzheimer disease.

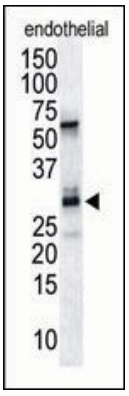
References

Minami, T., et al., J. Biol. Chem. 279(48):50537-50554 (2004). Yao, Y.G., et al., Biochem. Biophys. Res. Commun. 321(3):648-656 (2004). Michtalik, H.J., et al., Free Radic. Biol. Med. 37(4):454-462 (2004). Hesser, B.A., et al., Blood 104(1):149-158 (2004). Iizuka, M., et al., Biochem. Biophys. Res. Commun. 41(4):334-344 (2004).

Images



Endothelial cell lysate transferred to membrane was incubated with primary antibody at a 1:500 dilution in 2% BSA in TBST at 4deg C overnight. Data courtesy of Dr. Katherine Healey, NWCRF Institute, School of Biological Sciences, University of Wales Bangor.



The anti-DSCR1 Pab (Cat. #AP6315c) is used in Western blot to detect DSCR1 in endothelial tissue lysate.

Citations

- Ubiquitin-specific Protease 22 (USP22) Positively Regulates RCAN1 Protein Levels through RCAN1 De-ubiquitination.
- DSCR1 interacts with FMRP and is required for spine morphogenesis and local protein synthesis.
- Regulator of calcineurin 1 suppresses inflammation during respiratory tract infections.
- RCAN1 deficiency protects against Salmonella intestinal infection by modulating JNK activation.
- DSCR1 is required for both axonal growth cone extension and steering.
- NGF upregulates the plasminogen activation inhibitor-1 in neurons via the Calcineurin/NFAT pathway and the down syndrome-related proteins DYRK1A and RCAN1 attenuate this effect.
- Rcan1 negatively regulates Fc epsilonRI-mediated signaling and mast cell function.
- Glucocorticoid evoked upregulation of RCAN1-1 in human leukemic CEM cells susceptible to apoptosis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.