

Dexas1/2 (C-11): sc-398988

BACKGROUND

Dexas1 (RASD1; RAS, dexamethasone-induced 1) is a steroid hormone-dependent, Ras-related GTPase that influences cell morphology, growth, and cell-extracellular matrix interactions. Dexas1 can regulate receptor-mediated $G_{\beta/\gamma}$ (heterotrimeric G protein) signaling. Dexas1 couples NMDA and light input to $G_{i/o}$ and ERK activation. Dexas2 (Rhes; Ras homolog enriched in striatum, RASD2; RAS, dexamethasone-induced 2, TEM2; tumor endothelial marker 2) is a GTPase that is abundant in the striatal region of the brain where it mediates signal cascades. Dexas2 (Rhes) mRNA levels are under the influence of dopamine and may play a role in determining normal dopamine receptor sensitivity. Dexas1 and Dexas2 (Rhes) define a subfamily of proteins within the Ras family, characterized by an extended variable domain in the carboxyl terminal region.

REFERENCES

1. Fang, M., et al. 2000. Dexas1: a G protein specifically coupled to neuronal nitric oxide synthase via CAPON. *Neuron* 28: 183-193.
2. Graham, T.E., et al. 2002. Dexas1/AGS-1 inhibits signal transduction from the G_i -coupled formyl peptide receptor to Erk-1/2 MAP kinases. *J. Biol. Chem.* 277: 10876-10882.
3. Graham, T.E., et al. 2004. Dexas1 inhibits adenylyl cyclase. *Biochem. Biophys. Res. Commun.* 316: 307-312.
4. Van Gelder, R.N. 2004. Resetting the clock: Dexas1 defines a path. *Neuron* 43: 603-604.

CHROMOSOMAL LOCATION

Genetic locus: RASD1 (human) mapping to 17p11.2, RASD2 (human) mapping to 22q12.3; Rasd1 (mouse) mapping to 11 B1.3, Rasd2 (mouse) mapping to 8 C1.

SOURCE

Dexas1/2 (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 221-249 near the C-terminus of Dexas2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Dexas1/2 (C-11) is available conjugated to agarose (sc-398988 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398988 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398988 PE), fluorescein (sc-398988 FITC), Alexa Fluor[®] 488 (sc-398988 AF488), Alexa Fluor[®] 546 (sc-398988 AF546), Alexa Fluor[®] 594 (sc-398988 AF594) or Alexa Fluor[®] 647 (sc-398988 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398988 AF680) or Alexa Fluor[®] 790 (sc-398988 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398988 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Dexas1/2 (C-11) is recommended for detection of Dexas1 and Dexas2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Molecular Weight of Dexas1: 32 kDa.

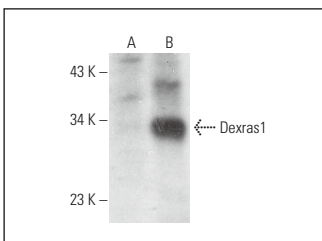
Molecular Weight of Dexas2: 30 kDa.

Positive Controls: human testis extract: sc-363781 or Dexas1 (h): 293 Lysate: sc-128448.

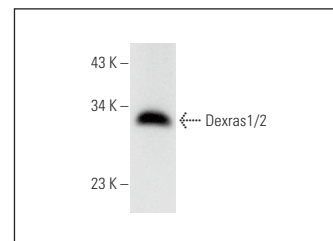
RECOMMENDED SUPPORT REAGENTS

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, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



Dexas1/2 (C-11): sc-398988. Western blot analysis of Dexas1/2 expression in non-transfected: sc-110760 (A) and human Dexas1 transfected: sc-128448 (B) 293 whole cell lysates.



Dexas1/2 (C-11): sc-398988. Western blot analysis of Dexas1/2 expression in human testis tissue extract.

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 for detailed protocols and support products.

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