

# Dexas1/2 (N-20): sc-16402

## 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

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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.
5. Cheng, H.Y., et al. 2004. Dexas1 potentiates photic and suppresses non-photic responses of the circadian clock. *Neuron* 43: 715-728.
6. Nguyen, C.H., et al. 2005. Dexas1 blocks receptor-mediated heterologous sensitization of adenylyl cyclase 1. *Biochem. Biophys. Res. Commun.* 332: 913-920.
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## 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 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Dexas2 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  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16402 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Dexas1/2 (N-20) is recommended for detection of Dexas1 and Dexas2 of mouse, rat and 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).

Dexas1/2 (N-20) is also recommended for detection of Dexas1 and Dexas2 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of Dexas1: 32 kDa.

Molecular Weight of Dexas2: 30 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **Dexas1/2 (C-11): sc-398988**, our highly recommended monoclonal alternative to Dexas1/2 (N-20).