# Dexras1/2 (C-20): sc-16404



The Power to Question

#### **BACKGROUND**

Dexras1 (RASD1; RAS, dexamethasone-induced 1) is a steroid hormone-dependent, Ras-related GTPase that influences cell morphology, growth, and cell-extracellular matrix interactions. Dexras1 can regulate receptor-mediated  $G_{\beta/\gamma}$  (heterotrimeric G protein) signaling. Dexras1 couples NMDA and light input to  $G_{i/o}$  and ERK activation. Dexras2 (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. Dexras2 (Rhes) mRNA levels are under the influence of dopamine and may play a role in determining normal dopamine receptor sensitivity. Dexras1 and Dexras2 (Rhes) define a subfamily of proteins within the Ras family, characterized by an extended variable domain in the carboxyl terminal region.

## **REFERENCES**

- Kemppainen, R.J. and Behrend, E.N. 1998. Dexamethasone rapidly induces a novel ras superfamily member-related gene in AtT-20 cells. J. Biol. Chem. 273: 3129-3131.
- 2. Falk, J.D., et al. 1999. Rhes: a striatal-specific Ras homolog related to Dexras1. J. Neurosci. Res. 57: 782-788.

#### 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

Dexras1/2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Dexras2 of human origin.

## **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-16404 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

Dexras1/2 (C-20) is recommended for detection of Dexras1 and Dexras2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffinembedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Dexras1/2 (C-20) is also recommended for detection of Dexras1 and Dexras2 in additional species, including equine, canine, bovine and avian.

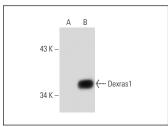
Molecular Weight of Dexras1: 32 kDa. Molecular Weight of Dexras2: 30 kDa.

Positive Controls: Dexras1 (h): 293 Lysate: sc-128448.

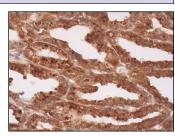
#### **RECOMMENDED SECONDARY REAGENTS**

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

#### **DATA**



Dexras1/2 (C-20): sc-16404. Western blot analysis of Dexras1 expression in non-transfected: sc-110760 (**A**) and human Dexras1 transfected: sc-128448 (**B**) 293



Dexras1/2 (C-20): sc-16404. Immunoperoxidase staining of formalin fixed, paraffin-embedded human seminal vesicle tissue showing cytoplasmic staining of glandular cells.

## **SELECT PRODUCT CITATIONS**

 Li, X., et al. 2008. Spatiotemporal expression of Dexras1 after spinal cord transection in rats. Cell. Mol. Neurobiol. 28: 371-388.

## **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 or our catalog for detailed protocols and support products.



Try **Dexras1/2 (C-11):** sc-398988, our highly recommended monoclonal alternative to Dexras1/2 (C-20).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com