# Dexras1 (h): 293 Lysate: sc-128448



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**

- Fang, M., et al. 2000. Dexras1: a G protein specifically coupled to neuronal nitric oxide synthase via CAPON. Neuron 28: 183-193.
- 2. Graham, T.E., et al. 2002. Dexras1/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. Dexras1 inhibits adenylyl cyclase. Biochem. Biophys. Res. Commun. 316: 307-312.
- Van Gelder, R.N. 2004. Resetting the clock: Dexras1 defines a path. Neuron 43: 603-604.
- Cheng, H.Y., et al. 2004. Dexras1 potentiates photic and suppresses nonphotic responses of the circadian clock. Neuron 43: 715-728.
- 6. Spano, D., et al. 2004. Rhes is involved in striatal function. Mol. Cell. Biol. 24: 5788-5796.
- Vargiu, P., et al. 2004. The small GTP-binding protein, Rhes, regulates signal transduction from G protein-coupled receptors. Oncogene 23: 559-568.
- Nguyen, C.H., et al. 2005. Dexras1 blocks receptor-mediated heterologous sensitization of adenylyl cyclase 1. Biochem. Biophys. Res. Commun. 332: 913-920
- 9. Sharoyko, V.V., et al. 2005. Monomeric G-protein, Rhes, is not an imidazoline-regulated protein in pancreatic  $\beta$ -cells. Biochem. Biophys. Res. Commun. 338: 1455-1459.

## **CHROMOSOMAL LOCATION**

Genetic locus: RASD1 (human) mapping to 17p11.2.

## **PRODUCT**

Dexras1 (h): 293 Lysate represents a lysate of human Dexras1 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

# **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## **APPLICATIONS**

Dexras1 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Dexras1 antibodies. Recommended use: 10-20 µl per lane.

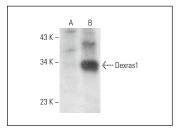
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Dexras1/2 (C-11): sc-398988 is recommended as a positive control antibody for Western Blot analysis of enhanced human Dexras1 expression in Dexras1 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### **DATA**



Dexras1/2 (C-11): sc-398988. Western blot analysis of Dexras1/2 expression in non-transfected: sc-110760 (A) and human Dexras1 transfected: sc-128448 (B) 293 whole cell lysates

#### **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.