# oligophrenin-1 (H-100): sc-25631



The Power to Question

## **BACKGROUND**

Ras p21 can exist in either a physiologically quiescent GDP-binding state or a GTP-binding signal-emitting state. Interaction of Ras p21 with GTPase activating protein (GAP) can increase the rate of hydrolysis of Ras p21-bound GTP by as much as 1000-fold. In mitogenically activated and tyrosine kinase-transformed cells, Ras GAP forms a complex with a protein designated p190. At its amino-terminus, p190 contains sequence motifs characteristic of all known GTPases, whereas the carboxy-terminus contains sequences similar to those found in the Bcr gene product, n-chimerin, and Rho GAP, all of which exhibit intrinsic GAP activity. Oligophrenein-1 is an additional protein with GTPase activating activity. Oligophrenein-1 is a RhoGAP protein that stimulates GTP hydrolysis of Rho subfamily members and is involved in cell migration, morphogenesis and axon outgrowth.

# **CHROMOSOMAL LOCATION**

Genetic locus: OPHN1 (human) mapping to Xq12; Ophn1 (mouse) mapping to X C3.

#### **SOURCE**

oligophrenin-1 (H-100) is a rabbit polyclonal antibody raised against amino acids 703-802 mapping at the C-terminus of oligophrenin-1 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

oligophrenin-1 (H-100) is recommended for detection of oligophrenin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

oligophrenin-1 (H-100) is also recommended for detection of oligophrenin-1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for oligophrenin-1 siRNA (h): sc-36125, oligophrenin-1 siRNA (m): sc-36126, oligophrenin-1 shRNA Plasmid (h): sc-36125-SH, oligophrenin-1 shRNA Plasmid (m): sc-36126-SH, oligophrenin-1 shRNA (h) Lentiviral Particles: sc-36125-V and oligophrenin-1 shRNA (m) Lentiviral Particles: sc-36126-V.

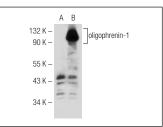
Molecular Weight of oligophrenin-1: 91 kDa.

Positive Controls: H4 cell lysate: sc-2408, rat brain extract: sc-2392 or oligophrenin-1 (m): 293T Lysate: sc-110337.

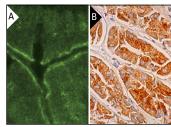
#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## **DATA**



oligophrenin-1 (H-100): sc-25631. Western blot analysis of oligophrenin-1 expression in non-transfected: sc-117752 (A) and mouse oligophrenin-1 transfected: sc-110337 (B) 2937 whole cell I yeates.



oligophrenin-1 (H-100): sc-25631. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells (B).

#### **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 **oligophrenin-1 (A-12):** sc-374330 or **oligophrenin-1 (E-8):** sc-376462, our highly recommended monoclonal alternatives to oligophrenin-1 (H-100).

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