# SANTA CRUZ BIOTECHNOLOGY, INC.

# RADIL (P-14): sc-163277



# BACKGROUND

RADIL (Ras association and DIL domains) is a 1,075 amino acid protein that contains one dilute domain, one FHA domain, one PDZ domain and one Rasassociating domain. Existing as multiple alternatively spliced isoforms, RADIL interacts with Rap 1A and functions as a downstream effector that is required for cell adhesion, as well as for the migration of neural crest precursors during development. The gene encoding RADIL maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

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- Sauka-Spengler, T. and Bronner-Fraser, M. 2008. A gene regulatory network orchestrates neural crest formation. Nat. Rev. Mol. Cell Biol. 9: 557-568.

#### CHROMOSOMAL LOCATION

Genetic locus: RADIL (human) mapping to 7p22.1; Radil (mouse) mapping to 5 G2.

#### SOURCE

RADIL (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RADIL 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.

Blocking peptide available for competition studies, sc-163277 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# APPLICATIONS

RADIL (P-14) is recommended for detection of RADIL 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RADIL siRNA (h): sc-89620, RADIL siRNA (m): sc-152679, RADIL shRNA Plasmid (h): sc-89620-SH, RADIL shRNA Plasmid (m): sc-152679-SH, RADIL shRNA (h) Lentiviral Particles: sc-89620-V and RADIL shRNA (m) Lentiviral Particles: sc-152679-V.

Molecular Weight of RADIL: 117 kDa.

Positive Controls: mouse brain extract: sc-2253, mouse cerebellum extract: sc-2403 or HEK293 whole cell lysate: sc-45136.

#### **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.

#### DATA





RADIL (P-14): sc-163277. Western blot analysis of RADIL expression in mouse cerebellum tissue extract (A) and HEK293 whole cell lysate (B).

RADIL (P-14): sc-163277. Western blot analysis of RADIL expression in mouse brain tissue extract.

#### **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.