UNC5H4 (Y-18): sc-67980



The Power to Question

BACKGROUND

The UNC5H family of proteins act as transmembrane receptors for netrin-1 and play a crucial role in axon guidance and migration of neural cells. Additionally, when cleaved by a caspase to produce an intracellular fragment containing a death domain, UNC5H receptors induce apoptosis. This activity is blocked by the binding of netrin-1. In the absence of netrin-1, UNC5H receptors act as tumor suppressors by inhibiting anchorage-independent growth and invasion, but mutation of these receptors provides a potential mechanism for tumorigenicity. The expression of UNC5H receptors is down-regulated in multiple carcinomas, including colorectal, breast, ovary, uterus, stomach, lung and kidney cancers. UNC5H4, also known as UNC5D (unc-5 homolog D), is single-pass type I membrane protein that is a member of the UNC5H netrin receptor family. Two isoforms of UNC5H4 exist due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: UNC5D (human) mapping to 8p12; Unc5d (mouse) mapping to 8 A2.

SOURCE

UNC5H4 (Y-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UNC5H4 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67980 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

UNC5H4 (Y-18) is recommended for detection of UNC5H4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

UNC5H4 (Y-18) is also recommended for detection of UNC5H4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for UNC5H4 siRNA (h): sc-63187, UNC5H4 siRNA (m): sc-63188, UNC5H4 shRNA Plasmid (h): sc-63187-SH, UNC5H4 shRNA Plasmid (m): sc-63188-SH, UNC5H4 shRNA (h) Lentiviral Particles: sc-63187-V and UNC5H4 shRNA (m) Lentiviral Particles: sc-63188-V.

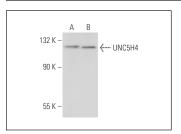
Molecular Weight of UNC5H4: 106 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 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



UNC5H4 (Y-18): sc-67980. Western blot analysis of UNC5H4 expression in HEK293 (**A**) and HeLa (**B**) whole cell lysates.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **UNC5H4 (4G3):** sc-517085, our highly recommended monoclonal alternative to UNC5H4 (Y-18).

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