

UNC5H2 (Q-20): sc-28048

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. In fact, UNC5H receptors express widely in cells that migrate, where they bind the G protein G_{α_i-2} to inhibit G protein signaling. Additionally, UNC5H receptors induce apoptosis when cleaved by a caspase, producing an intracellular fragment containing a death domain, but this activity is blocked by the binding of netrin-1. The expression of UNC5H receptors is downregulated in multiple cancers, including colorectal, breast, ovary, uterus, stomach, lung and kidney cancers. Hence, 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. UNC5H2, also designated UNC-5 homolog B or p53-regulated receptor for death and life protein 1 (p53RDL1) is highly expressed in brain with lower levels of expression observed in developing lung, cartilage, kidney and hematopoietic and immune tissues.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UNC5B (human) mapping to 10q22.1, UNC5C (human) mapping to 4q22.3; Unc5b (mouse) mapping to 10 B4, Unc5c (mouse) mapping to 3 H1.

SOURCE

UNC5H2 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of UNC5H2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28048 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UNC5H2 (Q-20) is recommended for detection of UNC5H2 and, to a lesser extent, UNC5H3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

UNC5H2 (Q-20) is also recommended for detection of UNC5H2 and, to a lesser extent, UNC5H3 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of UNC5H2: 100 kDa.

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) 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.

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 **UNC5H2 (1A9): sc-293240**, our highly recommended monoclonal alternative to UNC5H2 (Q-20).