

# UNC5H3 (E-16): sc-54441

## 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, UNC5H receptors induce apoptosis when cleaved by a caspase, producing an intracellular fragment containing a death domain. 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 cancers, including colorectal, breast, ovary, uterus, stomach, lung, and kidney cancers. UNC5H3, also known as UNC5C, plays an important role in the development of spinal accessory motor neurons. It is also involved in mediating the repulsive action for netrin-1 and it serves as a stop signal for migratory cells.

## REFERENCES

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3. Thiebault, K., et al. 2003. The netrin-1 receptors Unc5H are putative tumor suppressors controlling cell death commitment. *Proc. Natl. Acad. Sci. USA* 100: 4173-4178.
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## CHROMOSOMAL LOCATION

Genetic locus: UNC5C (human) mapping to 4q22.3; Unc5c (mouse) mapping to 3 H1.

## SOURCE

UNC5H3 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of UNC5H3 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-54441 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

UNC5H3 (E-16) is recommended for detection of UNC5H3 isoform 1 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).

UNC5H3 (E-16) is also recommended for detection of UNC5H3 isoform 1 in additional species, including bovine.

Suitable for use as control antibody for UNC5H3 siRNA (h): sc-72284, UNC5H3 siRNA (m): sc-72285, UNC5H3 shRNA Plasmid (h): sc-72284-SH, UNC5H3 shRNA Plasmid (m): sc-72285-SH, UNC5H3 shRNA (h) Lentiviral Particles: sc-72284-V and UNC5H3 shRNA (m) Lentiviral Particles: sc-72285-V.

Molecular Weight of UNC5H3: 130 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **UNC5H3 (Zg06): sc-80422**, our highly recommended monoclonal alternative to UNC5H3 (E-16).