

Fn14 (C-13): sc-27143

BACKGROUND

Fn14, the TWEAK receptor, is a recently identified member of the TNF receptor superfamily and is expressed on smooth muscle cells and endothelial cells. Fn14 is a weak inducer of apoptosis and promotes angiogenesis. Fn14, a type 1 membrane protein, associates with TRAF1 and TRAF2, and may modulate cellular adhesion to matrix proteins. It is highly expressed in heart, placenta and kidney, and moderately expressed in lung, skeletal muscle and pancreas. Fn14 is the smallest member of the TNF receptor (TNFR) superfamily described to date, and signals via recruitment of several different TNFR-associated factors.

REFERENCES

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- Wiley S.R. and Winkles, J.A. 2003. TWEAK, a member of the TNF superfamily, is a multifunctional cytokine that binds the TWEAKR/Fn14 receptor. *Cytokine Growth Factor Review* 14: 241-249.
- Campbell, S., et al. 2004. The role of TWEAK/Fn14 IN the pathogenesis of inflammation and systemic autoimmunity. *Front Biosci.* 9: 2273-2284.
- Kawakita, T., et al. 2005. Functional expression of TWEAK in human colonic adenocarcinoma cells. *Int. J. Oncol.* 26: 87-93.
- Tran, N.L., et al. 2005. The tumor necrosis factor-like weak inducer of apoptosis (TWEAK)-fibroblast growth factor-inducible 14 (Fn14) signaling system regulates glioma cell survival via NF κ B pathway activation and Bcl-x_L/Bcl-W expression. *J. Biol. Chem.* 280: 3483-3492.

CHROMOSOMAL LOCATION

Genetic locus: TNFRSF12A (human) mapping to 16p13.3; Tnfrsf12a (mouse) mapping to 17 A3.3.

SOURCE

Fn14 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Fn14 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-27143 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Fn14 (C-13) is recommended for detection of Fn14 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).

Fn14 (C-13) is also recommended for detection of Fn14 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Fn14 siRNA (h): sc-43764, Fn14 siRNA (m): sc-145209, Fn14 shRNA Plasmid (h): sc-43764-SH, Fn14 shRNA Plasmid (m): sc-145209-SH, Fn14 shRNA (h) Lentiviral Particles: sc-43764-V and Fn14 shRNA (m) Lentiviral Particles: sc-145209-V.

Molecular Weight of Fn14: 14 kDa.

Positive Controls: HISM cell lysate: sc-2229.

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.

RESEARCH USE

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



Try **Fn14 (ITEM-4): sc-56250**, our highly recommended monoclonal alternatives to Fn14 (C-13). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Fn14 (ITEM-4): sc-56250**.