# Fn14 (h2): 293T Lysate: sc-174426



The Power to Question

#### **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. A type 1 membrane protein, Fn14, 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, the smallest member of the TNF receptor (TNFR) superfamily described to date, signals via recruitment of several different TNFR-associated factors.

# **REFERENCES**

- 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 Rev. 14: 241-249.
- 2. Han S., Yoon, K., Lee, K., Kim, K., Jang, H., Lee, N.K., Hwang, K. and Young Lee, S. 2003. TNF-related weak inducer of apoptosis receptor, a TNF receptor superfamily member, activates NFκB through TNF receptorassociated factors. Biochem. Biophys. Res. Commun. 305: 789-796.
- Tran, N. L., McDonough, W.S., Donohue, P.J., Winkles, J.A., Berens, T.J., Ross, K.R., Hoelzinger, D.B., Beaudry, C., Coons, S.W. and Berens, ME. 2003. The human Fn14 receptor gene is upregulated in migrating glioma cells *in vitro* and overexpressed in advanced glial tumors. Am. J. Pathol. 162: 1313-1321.
- Campbell, S., Michaelson, J., Burkly, L. and Putterman, C. 2004. The role of TWEAK/Fn14 in the pathogenesis of inflammation and systemic autoimmunity. Front. Biosci. 9: 2273-2284.
- Mueller, A.M., Pedré, X., Kleiter, I., Hornberg, M., Steinbrecher, A. and Giegerich, G. 2005. Targeting fibroblast growth factor-inducible-14 signaling protects from chronic relapsing experimental autoimmune encephalomyelitis. J. Neuroimmunol. 159: 55-65.
- 6. Tran, N. L., McDonough, W.S., Savitch, B.A., Sawyer, T.F., Winkles, J.A. and Berens, M.E. 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 $\kappa$ B pathway activation and Bcl-x $_1$ /Bcl-w expression. J. Biol. Chem. 280: 3483-3492.
- Kawakita, T., Shiraki, K., Yamanaka, Y., Yamaguchi, Y., Saitou, Y., Enokimura, N., Yamamoto, N., Okano, H., Sugimoto, K., Murata, K. and Nakano, T. 2005. Functional expression of TWEAK in human colonic adenocarcinoma cells. Int. J. Oncol. 26: 87-93.
- 8. Swiss-Prot/Trembl (Q9NP84). http://www.ncbi.nlm.nih.gov/entrez/query.

# **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **PROTOCOLS**

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

#### **CHROMOSOMAL LOCATION**

Genetic locus: TNFRSF12A (human) mapping to 16p13.3.

#### **PRODUCT**

Fn14 (h2): 293T Lysate represents a lysate of human Fn14 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **APPLICATIONS**

Fn14 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Fn14 antibodies. Recommended use: 10-20  $\mu$ l per lane.

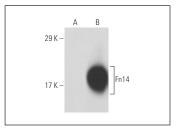
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Fn14 (ITEM-4): sc-56250 is recommended as a positive control antibody for Western Blot analysis of enhanced human Fn14 expression in Fn14 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# **DATA**



Fn14 (ITEM-4): sc-56250. Western blot analysis of Fn14 expression in non-transfected: sc-117752 (A) and human Fn14 transfected: sc-174426 (B) 293T whole cell Iwsates

#### **RESEARCH USE**

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

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