# SANTA CRUZ BIOTECHNOLOGY, INC.

# NET-7 (H-135): sc-135319



# BACKGROUND

NET-7, also known as TSPAN15 (tetraspanin 15) or TM4SF15 (transmembrane 4 superfamily member 15), is a 294 amino acid multi-pass membrane protein that belongs to the transmembrane 4 superfamily, also known as the tetraspanin family. Members of the tetraspanin family are cell-surface proteins that are characterized by the presence of four hydrophobic domains and mediate signal transduction events that play a role in the regulation of cell development, activation, growth, motility, differentiation and cancer. Considered molecular facilitators, tetraspanin proteins may regulate vesicle fusion and fission.

#### REFERENCES

- Maecker, H.T., Todd, S.C. and Levy, S. 1997. The tetraspanin superfamily: molecular facilitators. FASEB J. 11: 428-442.
- Hemler, M.E. 2003. Tetraspanin proteins mediate cellular penetration, invasion, and fusion events and define a novel type of membrane microdomain. Annu. Rev. Cell Dev. Biol. 19: 397-422.
- Yunta, M. and Lazo, P.A. 2003. Tetraspanin proteins as organisers of membrane microdomains and signalling complexes. Cell. Signal. 15: 559-564.
- Tarrant, J.M., Robb, L., van Spriel, A.B. and Wright, M.D. 2003. Tetraspanins: molecular organisers of the leukocyte surface. Trends Immunol. 24: 610-617.
- Wright, M.D., Moseley, G.W. and van Spriel, A.B. 2004. Tetraspanin microdomains in immune cell signalling and malignant disease. Tissue Antigens 64: 533-542.
- Levy, S. and Shoham, T. 2005. The tetraspanin web modulates immunesignalling complexes. Nat. Rev. Immunol. 5: 136-148.
- Garcia-España, A., Chung, P.J., Sarkar, I.N., Stiner, E., Sun, T.T. and Desalle, R. 2008. Appearance of new tetraspanin genes during vertebrate evolution. Genomics 91: 326-334.

# CHROMOSOMAL LOCATION

Genetic locus: TSPAN15 (human) mapping to 10q22.1; Tspan15 (mouse) mapping to 10 B4.

#### SOURCE

NET-7 (H-135) is a rabbit polyclonal antibody raised against amino acids 1-135 mapping at the N-terminus of NET-7 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

NET-7 (H-135) is recommended for detection of NET-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

NET-7 (H-135) is also recommended for detection of NET-7 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for NET-7 siRNA (h): sc-90664, NET-7 siRNA (m): sc-154725, NET-7 shRNA Plasmid (h): sc-90664-SH, NET-7 shRNA Plasmid (m): sc-154725-SH, NET-7 shRNA (h) Lentiviral Particles: sc-90664-V and NET-7 shRNA (m) Lentiviral Particles: sc-154725-V.

Molecular Weight of NET-7: 33 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **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.