SANTA CRUZ BIOTECHNOLOGY, INC.

NET-2 (H-25): sc-133810

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NET-2, also known as Tetraspanin-12 and Transmembrane 4 superfamily member 12, is a 305 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. Specifically, NET-2 plays a central role in retinal vascularization via regulation of NORRIN signal transduction. NET-2 also regulates membrane proteinases such as MT-MMP-1 and ADAM10. There are two isoforms of NET-2 which are produced as a result of alternative splicing events.

REFERENCES

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3. Berditchevski, F. 2001. Complexes of tetraspanins with integrins: more than meets the eye. J. Cell. Sci. 114: 4143-4151.
4. Hübner, K., et al. 2002. Tetraspan vesicle membrane proteins: synthesis, subcellular localization, and functional properties. Int. Rev. Cytol. 214: 103-159.
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CHROMOSOMAL LOCATION

Genetic locus: TSPAN12 (human) mapping to 7q31.31; Tspan12 (mouse) mapping to 6 A3.1.

SOURCE

NET-2 (H-25) is an affinity purified rabbit polyclonal antibody raised against synthetic NET-2 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

NET-2 (H-25) is recommended for detection of NET-2 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NET-2 siRNA (h): sc-89361, NET-2 siRNA (m): sc-149913, NET-2 shRNA Plasmid (h): sc-89361-SH, NET-2 shRNA Plasmid (m): sc-149913-SH, NET-2 shRNA (h) Lentiviral Particles: sc-89361-V and NET-2 shRNA (m) Lentiviral Particles: sc-149913-V.

Molecular Weight (predicted) of NET-2: 35 kDa.

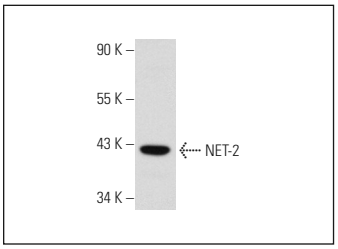
Molecular Weight (observed) of NET-2: 42 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237 or Hep G2 cell lysate: sc-2227.

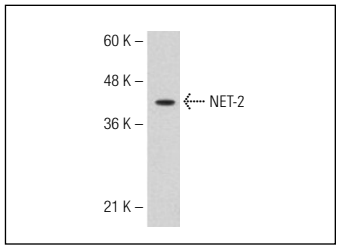
RECOMMENDED SECONDARY REAGENTS

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).

DATA



NET-2 (H-25): sc-133810. Western blot analysis of NET-2 expression in SK-N-MC whole cell lysate.



NET-2 (H-25): sc-133810. Western blot analysis of NET-2 expression in Hep G2 whole cell lysate.

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.