

# NET-4 (G-12): sc-138468

## BACKGROUND

NET-4, also known as TSPAN5 (tetraspanin 5) or TM4SF9, is a 268 amino acid multi-pass membrane protein that belongs to the tetraspanin family and is thought to play a role in signal transduction events related to cell development, activation, growth and motility. The gene encoding NET-4 maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

## REFERENCES

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2. Serru, V., Dessen, P., Boucheix, C. and Rubinstein, E. 2000. Sequence and expression of seven new tetraspans. *Biochim. Biophys. Acta* 1478: 159-163.
3. Berditshevski, F. 2001. Complexes of tetraspanins with integrins: more than meets the eye. *J. Cell Sci.* 114: 4143-4151.
4. Hübner, K., Windoffer, R., Hutter, H. and Leube, R.E. 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: TSPAN5 (human) mapping to 4q23; Tspan5 (mouse) mapping to 3 H1.

## SOURCE

NET-4 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of NET-4 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-138468 P, (100 µg 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.

## RESEARCH USE

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

## APPLICATIONS

NET-4 (G-12) is recommended for detection of NET-4 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); non cross-reactive with other NET family members.

NET-4 (G-12) is also recommended for detection of NET-4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NET-4 siRNA (h): sc-89102, NET-4 siRNA (m): sc-149914, NET-4 shRNA Plasmid (h): sc-89102-SH, NET-4 shRNA Plasmid (m): sc-149914-SH, NET-4 shRNA (h) Lentiviral Particles: sc-89102-V and NET-4 shRNA (m) Lentiviral Particles: sc-149914-V.

Molecular Weight of NET-4: 30 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.