

## TM4-B (K-14): sc-139087

### BACKGROUND

TM4-B, also known as TSPAN16 (tetraspanin-16) or TM4SF16 (transmembrane 4 superfamily member 16), is a 245 amino acid multi-pass membrane protein that belongs to the tetraspanin (TM4SF) family. Members of the TM4SF family mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. TM4-B is broadly expressed in most human tissues and cell lines including neural and bone marrow derived tissues. The gene that encodes TM4-B contains nearly 31,000 bases and maps to human chromosome 19p13.2. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families and Fc receptors (FcRs).

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: TSPAN16 (human) mapping to 19p13.2.

### SOURCE

TM4-B (K-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TM4-B of human origin.

### STORAGE

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

### PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139087 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

TM4-B (K-14) is recommended for detection of TM4-B of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TM4SF family members.

TM4-B (K-14) is also recommended for detection of TM4-B in additional species, including bovine and porcine.

Suitable for use as control antibody for TM4-B siRNA (h): sc-97735, TM4-B shRNA Plasmid (h): sc-97735-SH and TM4-B shRNA (h) Lentiviral Particles: sc-97735-V.

Molecular Weight of TM4-B: 26 kDa.

### 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) 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](http://www.scbt.com) or our catalog for detailed protocols and support products.