

# Prickle4 (N-14): sc-241641

## BACKGROUND

Prickle4, also known as OEFT (overexpressed breast tumor protein), OBTP or TOMM6, is a 344 amino acid protein that contains one PET domain, two LIM zinc-binding domains, and belongs to the Prickle family. Prickle4 exists as three alternatively spliced isoforms that are expressed in prostate and breast cancers, hepatocellular carcinoma and a number of normal tissues. The gene encoding Prickle4 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PRICKLE4 (human) mapping to 6p21.1.

## SOURCE

Prickle4 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Prickle4 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-241641 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Prickle4 (N-14) is recommended for detection of Prickle4 of 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 LMO6, Prickle1 or Prickle2.

Suitable for use as control antibody for Prickle4 siRNA (h): sc-95577, Prickle4 shRNA Plasmid (h): sc-95577-SH and Prickle4 shRNA (h) Lentiviral Particles: sc-95577-V.

Molecular Weight of Prickle4 isoform 1: 38 kDa.

Molecular Weight of Prickle4 isoform 2: 33 kDa.

Molecular Weight of Prickle4 isoform 3: 42 kDa.

## 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.

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