

# PSG4 (T-12): sc-240791

## BACKGROUND

PSG4 (pregnancy specific  $\beta$ -1-glycoprotein 4), also known as PSG9 or CGM4, is a 419 amino acid secreted protein that exists as two alternatively spliced isoforms. PSG4 belongs to the PSG family, a group of closely related secreted glycoproteins that are highly expressed in fetal placental syncytiotrophoblast cells. Members of the PSG protein family have a characteristic N-terminal domain that is homologous to the immunoglobulin variable region. PSGs become detectable in serum during the first two to three weeks of pregnancy and increase as the pregnancy progresses, eventually representing the most abundant fetal protein in the maternal blood at term. PSGs function to stimulate secretion of TH2-type cytokines from monocytes, and they may also modulate the maternal immune system during pregnancy, thereby protecting the semi-allotypic fetus from rejection.

## REFERENCES

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## RESEARCH USE

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

## CHROMOSOMAL LOCATION

Genetic locus: PSG4 (human) mapping to 19q13.31.

## SOURCE

PSG4 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PSG4 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-240791 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PSG4 (T-12) is recommended for detection of PSG4 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); may cross-react with PSG1, PSG2, PSG3, PSG7 or PSG8.

Suitable for use as control antibody for PSG4 siRNA (h): sc-97632, PSG4 shRNA Plasmid (h): sc-97632-SH and PSG4 shRNA (h) Lentiviral Particles: sc-97632-V.

Molecular Weight of PSG4 isoforms: 47/36 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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.

## PROTOCOLS

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