

# PSG6 (F-18): sc-102071

## BACKGROUND

Pregnancy-specific  $\beta$ -1-glycoprotein 6 (PSG6) is a member of the PSG family, a group of closely related secreted glycoproteins that are highly expressed in fetal placental syncytiotrophoblast cells. The members of the PSG protein family all 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. PSGs are commonly expressed in trophoblast tumors. Eleven human PSG proteins (PSG1-PSG11) have been described.

## REFERENCES

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2. Oikawa, S., et al. 1989. A pregnancy-specific  $\beta$  1-glycoprotein, a CEA gene family member, expressed in a human promyelocytic leukemia cell line, HL-60: structures of protein, mRNA and gene. *Biochem. Biophys. Res. Commun.* 163: 1021-1031.
3. Chan, W.Y., et al. 1991. Characterization of new members of the pregnancy-specific  $\beta$  1-glycoprotein family. *Mol. Cell. Biochem.* 106: 161-170.
4. Teglund, S., et al. 1994. The pregnancy-specific glycoprotein (PSG) gene cluster on human chromosome 19: fine structure of the 11 PSG genes and identification of 6 new genes forming a third subgroup within the carcinoembryonic antigen (CEA) family. *Genomics* 23: 669-684.
5. Koritschoner, N.P., et al. 1996. Analyses of *cis*-acting and *trans*-acting elements that are crucial to sustain pregnancy-specific glycoprotein gene expression in different cell types. *Eur. J. Biochem.* 236: 365-372.
6. Bersinger, N.A., et al. 1998. Serum pregnancy-specific  $\beta$ 1-glycoprotein before embryo transfer is related to endometrial thickness and to outcome prognosis in women undergoing *in vitro* fertilization treatment. *Hum. Reprod.* 13: 1962-1967.
7. Panzetta-Dutari, G.M., et al. 2000. Transcription of genes encoding pregnancy-specific glycoproteins is regulated by negative promoter-selective elements. *Biochem. J.* 350: 511-519.
8. Snyder, S.K., et al. 2001. Pregnancy-specific glycoproteins function as immunomodulators by inducing secretion of IL-10, IL-6 and TGF $\beta$ 1 by human monocytes. *Am. J. Reprod. Immunol.* 45: 205-216.
9. McLellan, A.S., et al. 2005. Conservation of pregnancy-specific glycoprotein (PSG) N domains following independent expansions of the gene families in rodents and primates. *BMC Evol. Biol.* 5: 39.

## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: PSG6 (human) mapping to 19q13.31.

## SOURCE

PSG6 (F-18) is a purified rabbit polyclonal antibody raised against PSG6 of human origin.

## PRODUCT

Each vial contains 50  $\mu$ g IgG in 500  $\mu$ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

PSG6 (F-18) is recommended for detection of PSG6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 PSG6 siRNA (h): sc-97237, PSG6 shRNA Plasmid (h): sc-97237-SH and PSG6 shRNA (h) Lentiviral Particles: sc-97237-V.

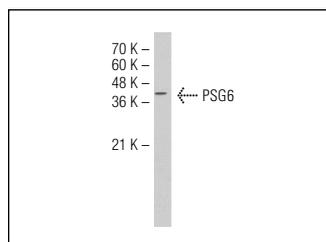
Molecular Weight of PSG6: 49 kDa.

Positive Controls: 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



PSG6 (F-18): sc-102071. Western blot analysis of PSG6 expression in Hep G2 whole cell lysate.

## RESEARCH USE

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