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Anti-SVS(Human)

Semenogelin -SeminalVesicleSecretoryProtein

Cat.#12 -01-16410(0.1ml)

Background:

Human seminal plasma spontaneously coagulates after ejaculation. The major component of this coagulum is seminal vesicle protein (semenogelin (Sg)), a 52 -kDa protein expressed exclusively in the seminal vesicles. The protein is rapidly cleaved after ejaculation by the chymotrypsin -like prostatic protease prostate -specific antigen, resulting in liquefaction of the semen coagulum and the progressive release of motile spermatozoa. Some of the cleavage products of Sg may also have various biological functions. While the Sg protein is unique to human and higher primates, it has recently been shown to belong to a gene family having a similar general structure but encoding widely differing proteins (1). Sg has been shown to be digested by a seminal Ser protease, prostate -specific antigen (PSA). PSA is a 33 kD protein synthesized in the epithelial cells of the prostate gland. It is a Ser protease that belongs to the subgroup of kallikreins, among which it is very similar to a putative enzyme called human glandular kallikrein (hGK -1). PSA has been also shown to degrade insulin -like growth factor -binding protein -3. Serum PSA concentrations are frequently increased in patients with prostatic cancer, but this is also the case in patients with benign prostatic hyperplasia. Serum PSA concentrations can be successfully used together with other methods in diagnosing prostatic diseases and in monitoring the successfulness of treatments for prostatic cancer (2,3).

Species Reactivity:

mouse, rat

Immunogen:

Rabbit anti-serum was generated using a synthetic peptide from the human SVS protein (X).

Supplied As:

Full Serum, Rabbit anti -serum with 15mM sodium azide.

Concentration:

Typical anti -SVS dilutions used are 1:1500 (v/v)

Storage and Stability:

Store vial at 4°C. When stored at 2 -8°C, this antibody is stable for 24 months.

Applications and Suggested Dilutions:

- **Western blotting;** 1:1500 -3000; ECL after SG quenching according to: **Krajewski S, Zapata JM, Reed JC:** (1996) *Analytical Biochem* 236:221 -228
- **Immunoprecipitation;** 1:50
- **Immunocytochemistry;** Paraffin sections: 1:600 - 1500 Detection: 4plus TMHRP ₅₀₀ Universal Kit

Controls: Incubations with normal rabbit IgG/serum 1:2000 + NSS (normal species serum) 1:8000.

The optimal dilution for a specific application under a given set of experimental conditions should be determined by the investigator.

Positive Control: spleen and other lymphoid organs, Jurkat cells

Limitations:

This Ab is available for research use only and is not approved for use in human or in clinical diagnosis.

Warranty:

There are no warranties, expressed or implied, which extend beyond this description. Biocarta is not liable for property damage, personal injury, or economic loss caused by this product.

Custom Service:

Please contact us if you require this product in a special format.

References:

1. Robert M. and Gagnon C. (1999) *Cell Mol Life Sci* **55**(6-7):944-60;
2. Henttu P. and Vihko P. (1994) *Ann Med* **26**(3):157-64;
3. Lilja H. (1985) *J Clin Invest* **76**(5):1899-903;