

SHBG Antibody
Catalog # ASC11839**Specification**

SHBG Antibody - Product Information

Application	WB, IF, E
Primary Accession	P04278
Other Accession	NP_001031 , 6462
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 25, 26, 31, 32, 38, 44 kDa

Application Notes	Observed: 35 kDa KDa SHBG antibody can be used for detection of SHBG by Western blot at 1 - 2 µg/ml. For immunofluorescence start at 20 µg/mL.
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SHBG Antibody - Additional Information

Gene ID **6462**

Target/Specificity

SHBG antibody was raised against a 16 amino acid peptide near the center of human SHBG. The immunogen is located within amino acids 220 - 270 of SHBG.

Reconstitution & Storage

Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

Precautions

SHBG Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SHBG Antibody - Protein Information

Name SHBG ([HGNC:10839](#))

Function

Functions as an androgen transport protein, but may also be involved in receptor mediated processes. Each dimer binds one molecule of steroid. Specific for 5-alpha-dihydrotestosterone, testosterone, and 17-beta-estradiol. Regulates the plasma metabolic clearance rate of steroid hormones by controlling their plasma concentration.

Cellular Location

Secreted. Note=In testis, it is synthesized by the Sertoli cells, secreted into the lumen of the seminiferous tubule and transported to the epididymis.

Tissue Location

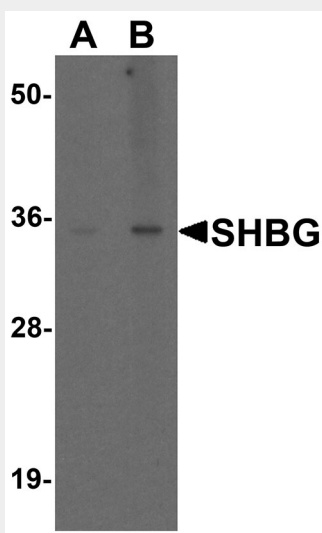
Isoform 1 and isoform 2 are present in liver and testis

SHBG Antibody - Protocols

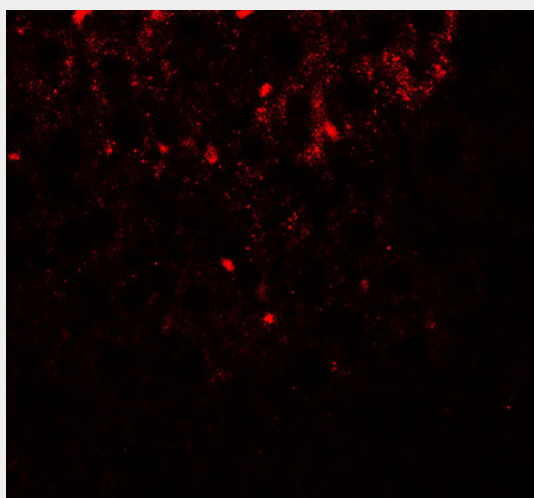
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SHBG Antibody - Images



Western blot analysis of SHBG in human liver tissue lysate with SHBG antibody at (A) 1 and (B) 2 $\mu\text{g/ml}$.



Immunofluorescence of SHBG in mouse liver tissue with SHBG antibody at 20 $\mu\text{g/ml}$.

SHBG Antibody - Background

SHBG is a steroid binding protein that was first described as a plasma protein secreted by the liver and is thought to participate in the regulation of steroid responses. SHBG transports androgens and estrogens in the blood, binding each steroid molecule as a dimer formed from identical or nearly identical monomers (1). Low plasma SHBG levels are associated with obesity, abdominal adiposity, metabolic syndrome, and predict the development of type 2 diabetes (2,3). Polymorphisms in this gene have been associated with polycystic ovary syndrome and type 2 diabetes mellitus (4).

SHBG Antibody - References

Siiteri PK, Murai JT, Hammond GL, et al. The serum transport of steroid hormones. Recent Prog. Horm. Res. 1982; 38:457-510.

Li C, Ford ES, Li B, et al. Association of testosterone and sex hormone-binding globulin with metabolic syndrome and insulin resistance in men. Diabetes Care 2010; 33:1618-24.

Ding EL, Song Y, Manson JE, et al. Sex hormone-binding globulin and risk of type 2 diabetes in women and men. N. Engl. J. Med. 2009; 361:1152-63.

Hacihanefioglu B, Aybey B, Hakan Ozon Y, et al. Association of anthropometric, androgenic and insulin-related features with polymorphisms in exon 8 of SHBG gene in women with polycystic ovary syndrome. Gynecol. Endocrinol. 2013; 29:361-4.