

Sex Hormone Binding Globulin (SHBG) Active Protein | SHBG active protein

Active Sex Hormone Binding Globulin (SHBG)

CATALOG # AAA150974	HOST 293F Cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Sex Hormone Binding Globulin (SHBG); Active Sex Hormone Binding Globulin (SHBG); SHBG/Sex Hormone Binding Globulin; ABP; TEBG; SBP; Sex steroid-binding protein; Testis-specific androgen-binding protein; Testosterone-estradiol-binding globulin; Testosterone-estrogen-binding globulin; SHBG active protein

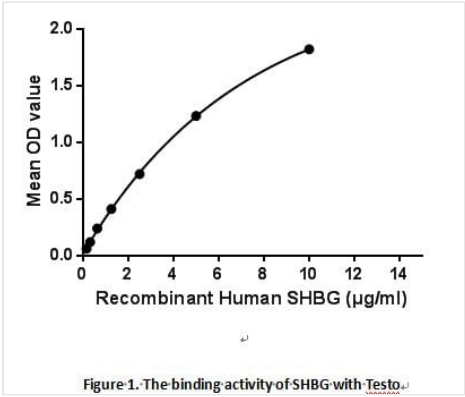
PRODUCT SPECIFICATIONS

Host	293F Cell
Purity/Purification	Greater than 97% by SDS-PAGE
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence	Arg31~Ser4 01
Applicable Applications for SHBG active protein	Activity Assay, Cell Culture
Endotoxin	<1.0EU per 1ug (determined by the LAL method)
Tag	N-terminal His Tag
Biological Activity	Active
Expression System	Eukaryotic expression
Organism Species	Human
Isoelectric Point	6.2
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months Stable for 12 months if correctly stored. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Sequence

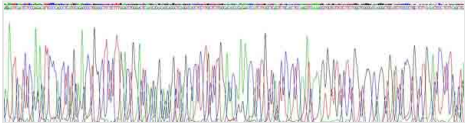
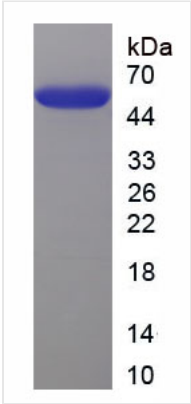
PGQEPIAVMT	FDLTKITKTS	SSFEVRTWDP	RPVLPTQSAH	DPPAVHLSNG
RDGRPEIQLH	NHWAQLTVGA	GPRLDDGRWH	QVEVKMEGDS	VLLVDGEEV
LRLRQVSGPL	TSKRHPIMRI	ALGGLFPAS	NLRPLVPAL	DGCLRRDSWL
DKQAEISASA	PTSLRSCDVE	SNPGIFLPPG	TQAEFNLRDI	PQPHAEPWAF
SLDLGLKQAA	GSQHLLALGT	PENPSWLSLH	LQDQKVVLS	SGSGPLDLPL
VLGLPLQLKL	SMSRVLSQG	SKMKALALPP	LGLAPLLNLW	AKPQGRFLFG
ALPGEDSSTS	FCLNGLWAQG	QRLDVDQALN	RSHEIWTWSC	PQSPGNGTDA

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Bioactivity

Sex hormone-binding globulin (SHBG) or sex steroid-binding globulin (SSBG) is a glycoprotein, a molecule that consists of a carbohydrate plus a protein, and is produced mainly in your liver. It binds to three sex hormones found in both men and women: estrogen, dihydrotestosterone (DHT) and testosterone. Its job is to transport these hormones throughout your blood to other tissues in your body. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human SHBG and bsa-conjugated testosterone (Testo). Briefly, biotin-linked recombinant human SHBG were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to bsa-conjugated Testo-coated microtiter wells and incubated for 1h at 37?. Wells were washed with PBST 3 times and incubation with HRP conjugate for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37?. Finally, add 50ul stop solution to the wells and read at 450nm immediately. The binding activity of SHBG and Testo was shown in Figure 1, and this effect was in a dose dependent manner.



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for SHBG active protein	Sex hormone-binding globulin (SHBG) or sex steroid-binding globulin (SSBG) isa glycoprotein, a molecule that consists of a carbohydrate plus a protein, and isproduced mainly in your liver. It binds to three sex hormones found in both menand women: estrogen, dihydrotestosterone (DHT) and testosterone. Its job is tottransport these hormones throughout your blood to other tissues in your body.Thus a binding ELISA assay was conducted to detect the interaction of recombinant human SHBG and bsa-conjugated testosterone (Testo) . Briefly,biotin-linked recombinant human SHBG were diluted serially in PBS, with 0.01%BSA (pH7.4). Duplicate samples of 100ul were then transferred tobsa-conjugated Testo-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST 3 times and incubation with HRP conjugage for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50ul stop solution to the wells and read at 450nm immediately. The binding activity ofSHBG and Testo was shown in Figure 1, and this effect was in a dose dependent manner.
Product Categories/Family for SHBG active protein	Endocrinology; Reproductive science; Active, eukaryotic recombinant

NCBI AND UNIPROT INFORMATION

NCBI GI #	7382460
NCBI GeneID	6462
NCBI Accession #	NP_001031.2
NCBI GenBank Nucleotide #	NM_001040.3
UniProt Accession #	P04278; P14689; Q16616; Q3MIL0; Q6ISD2; B0FWH4; E9PGW1; F5H5Z8; I3L1N7
Molecular Weight	43,779 Da
NCBI Official Full Name	sex hormone-binding globulin isoform 1
NCBI Official Synonym Full Names	sex hormone-binding globulin
NCBI Official Symbol	SHBG
NCBI Official Synonym Symbols	ABP; SBP; TEBG
NCBI Protein Information	sex hormone-binding globulin; sex steroid-binding protein; testosterone-binding beta-globulin; testosterone-estrogen-binding globulin; testosterone-estradiol-binding globulin; testis-specific androgen-binding protein
UniProt Protein Name	Sex hormone-binding globulin
UniProt Gene Name	SHBG
UniProt Synonym Gene Names	SHBG; SBP; ABP; TeBG
UniProt Entry Name	SHBG_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/293f-cell-active-protein/sex-hormone-binding-globulin-shbg/150974>