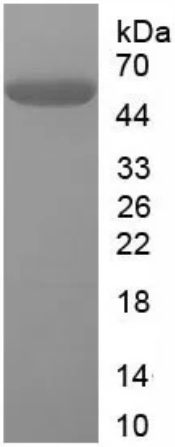
Active Sex Hormone Binding Globulin (SHBG)

Catalog#:PHH12359

概述（Summary）

别称（Alternative Names）	ABP; TEBG; SBP; Sex steroid-binding protein; Testis-specific androgen-binding protein; Testosterone-estradiol-binding globulin; Testosterone-estrogen-binding globulin
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Arg31-Ser401】
Accession #	P04278
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	42.0 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	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.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

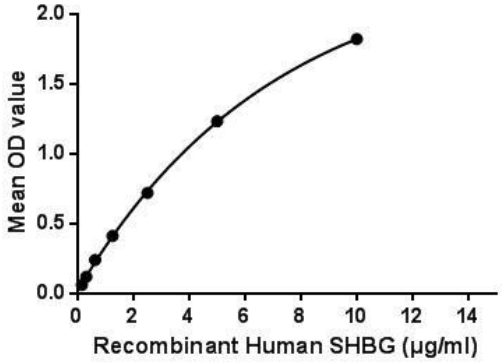


Figure 1. The binding activity of SHBG with Testo.

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 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℃. Finally, add 50μl 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.

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                                    RPVLPTQSAH DPPAVHLSNG
PGQEPIAVMT FDLTKITKTS SSFEVRTWDP EGVIFYGDTN PKDDWFMLGL
RDGRPEIQLH NHWAQLTVGA GPRLDDGRWH QVEVKMEGDS VLLEVDGEEV
LRLRQVSGPL TSKRHPIMRI ALGGLLFPAS NLRLPLVPAL DGCLRRDSWL
DKQAEISASA PTSLRSCDVE SNPGIFLPPG TQAEFNLRDI PQPHAEPWAF
SLDLGLKQAA GSGHLLALGT PENPSWLSLH LQDQKVVLSS GSGPGLDLPL
VLGLPLQLKL SMSRVVLSQG SKMKALALPP LGLAPLLNLW AKPQGRLFLG
ALPGEDSSTS FCLNGLWAQG QRLDVDQALN RSHEIWTHSC PQSPGNGTDA
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注意事项（Note）

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