

Product datasheet for RC228220

Sex Hormone Binding Globulin (SHBG) (NM_001146281) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sex Hormone Binding Globulin (SHBG) (NM_001146281) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sex Hormone Binding Globulin
Synonyms:	ABP; SBP; TEBG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228220 representing NM_001146281 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAGCAGAGGCCCACTGGCTACCTCGCGCCTGCTGCTGTTGCTGCTGTTGCTACTACTGCGTCACA
CCCGCCAGGGATGGGCCCTGAGACCTGTTCTCCCCACCCAGAGTGCCACGACCCCTCCGGCTGTCCACCT
CAGCAATGGCCCAGGACAAGAGCCTATCGCTGTCATGACCTTTGACCTCACCAAGATCACAAAACTCC
TCCTCCTTTGAGGTTCGAACCTGGGACCCAGAGGGAGTGATTTTTATGGGGATACCAACCCTAAGGATG
ACTGGTTTATGCTGGGACTTCGAGACGGCAGGCCTGAGATCCAATGCACAATCACTGGGCCAGCTTAC
GGTGGGTGCTGGACCACGGCTGGATGATGGGAGATGGCACCAGGTGGAAGTCAAGATGGAGGGGACTCT
GTGCTGCTGGAGGTGGATGGGGAGGAGTCTGCGCCTGAGACAGGTCTCTGGGCCCTGACCAGCAAAC
GCCATCCCATCATGAGGATTGCGCTTGGGGGGTCTCTTCCCCGCTTCCAACCTTCGGTTGCCGCTGGT
TCCTGCCCTGGATGGCTGCTGCGCCGGGATTCCTGGCTGGACAAACAGGCCGAGATCTCAGCATCTGCC
CCCCTAGCCTCAGAAGCTGTGATGTAGAATCAAATCCCGGGATATTTCTCCCTCCAGGGACTCAGGCAG
AATTCATCTCCGAGGAGAAGACTTCCACCTTTTTGCTGAATGGCCTTTGGGCACAAGGTCAGAG
GCTGGATGTGGACCAGGCCCTGAACAGAAGCCATGAGATCTGGACTCACAGCTGCCCCAGAGCCAGGC
AATGGCACTGACGCTTCCCAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC228220 representing NM_001146281
 Red=Cloning site Green=Tags(s)

MESRGPLATSRLLLLLLLLLLRHTRQGWALRPVLPQTSAHDPPAVHLSNGPGQEPIAVMTFDLTKITKTS
 SSFEVRTWDPEGVIFYGDTNPKDDWFMLGLRDRPEIQLHNHWAQLTVGAGPRLDDGRWHQVEVKMEGDS
 VLLEVDGEEVLRRLRQVSGPLTSKRHPIMRIALGGLLFPASNLRLPLVPALDGCLRRDSWLDKQAEISASA
 PTLRSCDVE SNPGIFLPPGTQAEFNLRGEDSSTSFCLNGLWAQQQRLDVDQALNRSHEIWTHSCPQSPG
 NGTDASH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8049_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001146281

ORF Size: 861 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001146281.2](#), [NP_001139753.1](#)

RefSeq ORF: 864 bp

Locus ID: 6462

UniProt ID: [P04278](#)

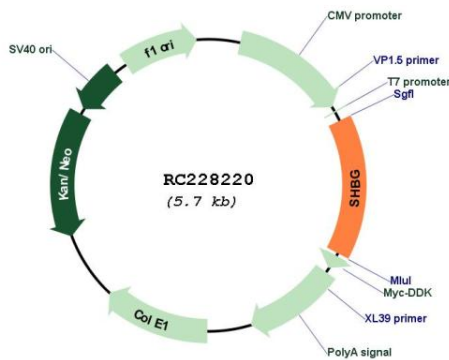
Cytogenetics: 17p13.1

Protein Families: Druggable Genome, Secreted Protein

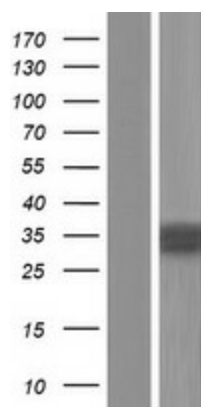
MW: 31.72 kDa

Gene Summary: This gene encodes a steroid binding protein that was first described as a plasma protein secreted by the liver but is now thought to participate in the regulation of steroid responses. The encoded protein transports androgens and estrogens in the blood, binding each steroid molecule as a dimer formed from identical or nearly identical monomers. Polymorphisms in this gene have been associated with polycystic ovary syndrome and type 2 diabetes mellitus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Product images:



Circular map for RC228220



Western blot validation of overexpression lysate (Cat# [LY431248]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228220 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).