

## Product datasheet for **RG228229**

### Sex Hormone Binding Globulin (SHBG) (NM\_001146280) Human Tagged ORF Clone

#### Product data:

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                            |
| Product Name:             | Sex Hormone Binding Globulin (SHBG) (NM_001146280) Human Tagged ORF Clone      |
| Tag:                      | TurboGFP                                                                       |
| Symbol:                   | SHBG                                                                           |
| Synonyms:                 | ABP; SBP; TEBG                                                                 |
| Mammalian Cell Selection: | Neomycin                                                                       |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                        |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                         |
| ORF Nucleotide Sequence:  | >RG228229 representing NM_001146280<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGAGCAGAGGCCCACTGGCTACCTCGCGCCTGCTGCTGTTGCTGCTGTTGCTACTACTGCGTCACA  
CCCGCCAGGGATGGGCCCTGAGACCTGTTCTCCCCACCCAGAGTGCCACGACCCCTCCGGCTGTCCACCT  
CAGCAATGGCCCAGGACAAGAGCCTATCGCTGTCATGACCTTTGACCTCACCAAGATCACAAAACTCC  
TCCTCCTTTGAGTTTGAACCTGGGACCCAGAGGGAGTGATTTTTATGGGGATACCAACCTAAGGATG  
ACTGGTTTATGCTGGGACTTCGAGACGGCAGGCCTGAGATCCAATGCACAATCACTGGGCCAGCTTAC  
GGTGGGTGCTGGACCACGGCTGGATGATGGGAGATGGCACCAGGTGGAAGTCAAGATGGAGGGGACTCT  
GTGCTGCTGGAGGTGGATGGGGAGGAGTCTGCGCCTGAGACAGGTCTCTGGGCCCTGACCAGCAAAC  
GCCATCCCATCATGAGGATTGCGCTTGGGGGGTCTCTTCCCCGCTTCCAACCTTCGGTTGCCGCTGGT  
TCCTGCCCTGGATGGCTGCTGCGCCGGGATTCCTGGCTGGACAAACAGGCCGAGATCTCAGCATCTGCC  
CCCCTAGCCTCAGAAGCTGTGATGTAGAATCAAATCCCGGGATTTTCTCCCTCCAGGGACTCAGGCAG  
AATTCAATCTCCGAGACATTCGCCAGCCTCATGCAGAGCCCTGGGCCCTCTCTTTGGACCTGGGACTCAA  
GCAGGCAGCAGGCTCAGGCCACCTCCTTGCTCTTGGGACACCAGAGAACCCATCTTGGCTCAGTCTCCAC  
CTCCAAGATCAAGAGAAGACTCTCCACCTCTTTTGCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG228229 representing NM\_001146280  
Red=Cloning site Green=Tags(s)

MESRGPLATSRLLLLLLLLLLRRHTRQGWALRPVLPQTSAHDPPAVHLSNGPGQEPIAVMTFDLTKITKTS  
 SSFEVRTWDPEGVIFYGDTNPKDDWFMLGLRDRPEIQLHNHWAQLTVGAGPRLDDGRWHQVEVKMEGDS  
 VLLEVDGEEVLRRLRQVSGPLTSKRHPIMRIALGGLLFPASNLRLPLVPALDGCLRRDSWLDKQAEISASA  
 PTLRSCDVESNPGIFLPPGTQAEFNLRDIPQPHAEPWAFSLDLGLKQAAGSGHLLALGTPENPSWLSLH  
 LQDQEKTLPLPFA

TRTRPLE - GFP Tag - V

**Restriction Sites:**

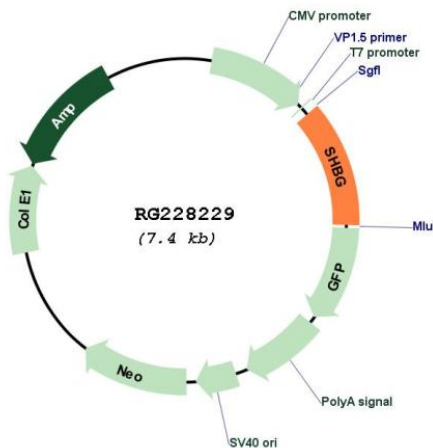
Sgfi-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_001146280

**ORF Size:** 879 bp

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>                                                                                                                   |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>                                                    |
| <b>RefSeq:</b>                | <a href="#">NM_001146280.3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>RefSeq Size:</b>           | 1069 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RefSeq ORF:</b>            | 882 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Locus ID:</b>              | 6462                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>UniProt ID:</b>            | <a href="#">P04278</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Cytogenetics:</b>          | 17p13.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Families:</b>      | Druggable Genome, Secreted Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Summary:</b>          | 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] |