

## CGB3

### Recombinant beta hCG, His Tag

|                                 |   |                  |                 |
|---------------------------------|---|------------------|-----------------|
| <b>Catalog No.</b>              | CS573A<br>CS573B  | <b>Quantity:</b> | 20 µg<br>1.0 mg |
| <b>Alternate Names:</b>         | Choriogonadotropin subunit beta 3, beta hCG, Choriogonadotropin subunit beta, Chorionic gonadotropin chain beta, CG-beta  |                  |                 |
| <b>Description:</b>             | Human chorionic gonadotropin is a complex glycoprotein composed of two glycosylated subunits alpha and beta which are non-covalently associated. The alpha subunit is identical to those in the pituitary gonadotropin hormones (LH, FSH and TSH). The beta subunits are distinct in each of the hormones and confer receptor and biological specificity. Increased levels of beta hCG indicates an implanted blastocyst and mammalian embryogenesis. Human chorionic gonadotropin can be used as a tumor marker as the $\beta$ subunit is secreted by some cancers including seminoma, choriocarcinoma, germ cell tumors, hydatidiform mole, teratoma with elements of choriocarcinoma, and islet cell tumor. For this reason, a positive result in males can be a test for testicular cancer. |                  |                 |
| <b>UniProt ID:</b>              | P0DN86  |                  |                 |
| <b>Source:</b>                  | <i>E. coli</i>  |                  |                 |
| <b>Protein Construction:</b>    | Beta hCG is fused to a 23 amino acid His-tag at N-terminus.   |                  |                 |
| <b>Molecular Weight:</b>        | 17.9 kDa (168 aa) monomer   |                  |                 |
| <b>Formulation:</b>             | Sterile filtered 20 mM Tris-HCl, pH 8.0 containing 0.4 M urea and 10% glycerol  |                  |                 |
| <b>Purity:</b>                  | ≥ 85% by SDS-PAGE   |                  |                 |
| <b>Amino Acid Sequence:</b>     | <u>MGSSHHHHHH SSGLVPRGSH MGSSKEPLRP RCRPINATLA VEKEGCPVCI</u><br>TVNTTICAGY CPTMTRVLQG VLPALPQVVC NYRDVRFESI RLPGCPRGVN<br>PVVSYAVALS CQCALCRRST TDCGGPKDHP LTCDDPRFQD SSSSKAPPPS<br>LPSPSRLPGP SDTPILPQ.   |                  |                 |
| <b>Storage &amp; Stability:</b> | Store at 2-8°C for 1 week or in aliquots at -20°C to -80°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).<br><b>Avoid repeated freeze/thaw cycles.</b>  |                  |                 |

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