HBG1, 1-147aa

Cat.NO.: TP02409

3th Edition

Synonyms: Hemoglobin subunit gamma-1, HBGA, HBGR, HSGGL1, PRO2979.

Description: The gamma globin genes (HBG1 and HBG2) are normally expressed in the fetal liver, spleen and bone marrow. Two gamma chains together with two alpha chains constitute fetal hemoglobin (HbF) which is normally replaced by adult hemoglobin (HbA) at birth. In some beta-thalassemias and related conditions, gamma chain production continues into adulthood. The two types of gamma chains differ at residue 136 where glycine is found in the G-gamma product (HBG2) and alanine is found in the A-gamma product (HBG1). The former is predominant at birth. The order of the genes in the beta-globin cluster is: 5' - epsilon – gamma-G – gamma-A – delta – beta - 3'. Recombinant human HBG1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form: Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol.

Molecular Weight:18kDa (170aa), confirmed by MALDI-TOF

Sequences:
MGSSHHHHHHSSGLVPRGSHMGSMGHFTEEDKATITSLWGKVNVEDAGGETLGRLLVVYPWTQRFFDSFGNLSS
ASAIMGNPKVKAHGKKVLTSLGDATKHLDDLKGTFAQLSELHCDKLHVDPENFKLLGNVLVTVLAIHFGKEFTPEVQ
ASWQKMVTAVASALSSRYH

Purity:> 95% by HPLC

Concentration:0.25 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.