

Recombinant human HBG1 protein

Catalog Number: ATGP2153

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-147aa

UniProt No.

P69891

NCBI Accession No.

NP_000550.2

Alternative Names

Hemoglobin subunit gamma-1, HBGA, HBGR, HSGGL1, PRO2979

PRODUCT SPECIFICATION

Molecular Weight

18 kDa (170aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

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

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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'.

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Recombinant human HBG1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>MGHFTEE DKATITSLWG KVNVEDAGGE TLGRLLVVYP WTQRFFDSFG
NLSSASAIMG NPKVKAHGKK VLTSLGDATK HLDDLKGTFA QLSELHCDKL HVDPENFKLL GNVLVTVLAI HFGKEFTPEV
QASWQKMVTA VASALSSRYH

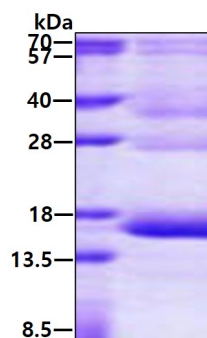
General References

Huisman TH, Kutlar F, et al. (1991). Hemoglobin. 15(5):349-79.

Loudianos G, Moi P, et al. (1992). Hemoglobin. 16(6):503-9.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.