

Recombinant human HBQ1 protein

Catalog Number: ATGP2230

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-142aa

UniProt No.

P09105

NCBI Accession No.

NP_005322

Alternative Names

Hemoglobin subunit theta-1, hemoglobin, theta 1

PRODUCT SPECIFICATION

Molecular Weight

17.9 kDa (165aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity

> 90% 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

Hemoglobin subunit theta-1, also known as HBQ1, belongs to the Hemoglobin family. Hemoglobin (Hgb) is a 66.7 kDa protein coupled to four iron-binding, methenelinked tetrapyrrole rings (heme). The globin portion of Hgb consists of two alpha chains and two beta chains arranged in pairs forming a tetramer. Each of the four globin chains covalently associates with a heme group. The bonds between alpha and beta chains are weaker than between similar globin chains, thereby forming a cleavage plane that is important for oxygen binding and release. High affinity for oxygen occurs upon relaxation of the alpha1-beta2 cleavage plane. Recombinant

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human HBQ1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

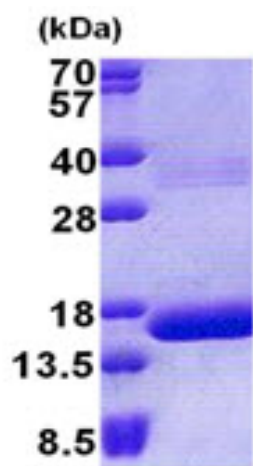
MGSSHHHHHH SGLVPRGSH MGSMAESAED RALVRALWKK LGSNMGVYTT EALERTFLAF PATKTYFSL DLSPGSSQVR
AHGQKVADAL SLAVERLDDL PHALSALSHL HACQLRVDPA SFQLLGHCLL VTLARHYPGD FSPALQASLD KFLSHVISAL
VSEYR

General References

Liebhaber S A., et al. (1981) Nature. 290:26-29
Sudha R., et al. (2004) J biol Chem. 279:20018-20027.

DATA

SDS-PAGE



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

15% SDS-PAGE (3ug)