HBQ1, 1-142aa, Human, His tag, E.coli

Cat.NO.: TP02411

3th Edition

Synonyms: Hemoglobin subunit theta-1, hemoglobin, theta 1

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 human HBQ1 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, 1mM DTT

Molecular Weight:17.9 kDa (165aa), confirmed by MALDI-TOF

Sequences:
MGSSHHHHHHSSGLVPRGSHMGSMALSAEDRALVRALWKKLGSNVGVYTTEALERTFLAFPATKTYFSHLDLSPG
SSQVRAHGQKVADALSLAVERLDDLPHALSALSHLHACQLRVDPASFQLLGHCLLVTLARHYPGDFSPALQASLDK
FLSHVISALVSEYR

Purity:> 95% by HPLC

Concentration:1 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.