

32-8592: Recombinant Human Hemoglobin Subunit theta-1/HBQ1 (N-6His)

Gene : HBQ1
Gene ID : 3049
Uniprot ID : P09105

Description

Source: E.coli.
MW :17.7kD.

Recombinant Human Hemoglobin subunit theta-1 is produced by our E.coli expression system and the target gene encoding Met1-Arg142 is expressed with a 6His tag at the N-terminus. Hemoglobin subunit theta-1 is a protein that in humans is encoded by the HBQ1 gene. Theta-globin mRNA is originally found in human fetal erythroid tissue but not in adult erythroid or other nonerythroid tissue. Theta-1 is a member of the human alpha-globin gene cluster that includes five functional genes and two pseudogenes. Research supports a transcriptionally active role for the gene and a functional role for the peptide in specific cells, possibly those of early erythroid tissue. Hemoglobin has a quaternary structure characteristically composed of many multi-subunit globular proteins. Most of the amino acids in hemoglobin form alpha helices, connected by short non-helical segments. Hydrogen bonds stabilize the helical sections inside this protein, causing attractions within the molecule, folding each polypeptide chain into a specific shape. Hemoglobin's quaternary structure comes from its four subunits in roughly a tetrahedral arrangement.

Product Info

Amount : 10 µg / 50 µg
Content : Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.0.
Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
Amino Acid : MGSSHHHHHHSSGLVPRGSHMALSAEDRALVRALWKKLGSNVGVYTTTEALERTFLAFPATKTYFSHLDLSPGS
SQVRAHGQKVADALSLAVERLDDLPHALSALSHLHACQLRVDPAFQLLGHCLLVTLARHYPGDFSPALQASL
DKFLSHVISALVSEYR

Application Note

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.