

## 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 :** MGSSHHHHHSSGLVPRGSHMALSAEDRALVRALWKKLGSNVGVYTTTEALERTFLAFPATKTYFSHLDLSPGS  
SQVRAHGQKVADALSLAVERLDDLPHALSALSHLHACQLRVDPAFQLLGHCLLVTLARHYPGDFSPALQASL  
DKFLSHVISALVSEYR

### Application Note

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