

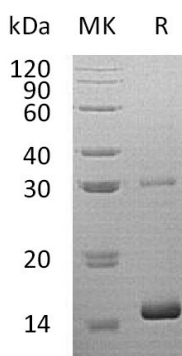
**Product Name: Recombinant Human HBQ1 (N-6His)**  
**Catalog #: PEH0774**



## Summary

<b>Name</b>	HBQ1/Hemoglobin subunit theta-1
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	<1 EU/μg as determined by LAL test.
<b>Construction</b>	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.
<b>Accession #</b>	P09105
<b>Host</b>	E.coli
<b>Species</b>	Human
<b>Predicted Molecular Mass</b>	17.7 KDa
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20mM Histidine, 10% Sucrose, 3% Mannitol, 0.5mM EDTA, 0.05% Tween80, pH 5.5.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SDS-PAGE image



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## Background

**Alternative Names** Hemoglobin subunit theta-1; Hemoglobin theta-1 chain; Theta-1-globin; HBQ1

**Background** 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. Hemoglobins quaternary structure comes from its four subunits in roughly a tetrahedral arrangement.

## Note

For Research Use Only , Not for Diagnostic Use.