

Product datasheet for TP727324

OriGene Technologies, Inc.

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HBQ1 Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Human Hemoglobin Subunit Î,-1/HBQ1 (N-6His)

Species: Human

Expression cDNA Clone

or AA Sequence:

Met1-Arg142

Tag: N-His

Buffer: Lyophilized from a 0.2 um filtered solution of 20mM PB, 150mM NaCl, pH 7.0.

Note: 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.

Storage: 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.

Stability: 12 months from date of despatch

Locus ID: 3049 **UniProt ID:** P09105

Synonyms: Hemoglobin subunit theta-1; Hemoglobin theta-1 chain; Theta-1-globin; HBQ1

Summary: 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.

