

Recombinant Human HBQ1 Protein (His Tag)

Catalog No. PKSH032532

Note: Centrifuge before opening to ensure complete recovery of vial contents.

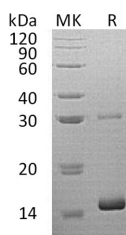
Description

Synonyms	Hemoglobin subunit theta-1;Hemoglobin theta-1 chain;Theta-1-globin;HBQ1
Species	Human
Expression Host	E.coli
Sequence	Met 1-Arg142
Accession	P09105
Calculated Molecular Weight	17.7 kDa
Observed molecular weight	15&30 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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

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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.