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Datasheet for ABIN7318569 HBA1 Protein (His tag)

Overview

Quantity:	50 µg
Target:	HBA1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HBA1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human HBA1 Protein (His Tag)
Sequence:	Met 1-Arg142
Characteristics:	Recombinant Human Hemoglobin subunit alpha 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.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	HBA1
Alternative Name:	HBA1 (HBA1 Products)
Background:	Background: Hemoglobin subunit alpha 1 (HBA1), also known as $\alpha 2\beta 2$, is a hetero-tetramer consisting of two α and two β subunits held together by non-covalent interactions. Each subunit contains a heme group with an iron atom in the Fe ²⁺ state. Cooperativity of

Target Details

Hemoglobin (Hb) in binding with O₂ and allosteric regulatory binding properties with CO₂, H⁺, Cl⁻, and 2,3-DPG (2,3-bisphosphoglycerate) are based on subunit interactions. HBA1 is the most common type of Hb in adult humans, which mediates the transport of oxygen and carbon dioxide in the blood. In recent years, Hb α and β chains have been found co-expressed in alveolar cells, mesangial cells of the kidney, retinal ganglion cells, hepatocytes and neurons. Endothelial and peripheral catecholaminergic cells express exclusively the α chain, while macrophages present the β chain only.

Synonym: Hemoglobin subunit alpha, Alpha-globin, Hemoglobin alpha chain, HBA1, HBH, HBA-T3

Molecular Weight: 16.7 kDa

UniProt: [P69905](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

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

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: 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.