

# Recombinant Human HBA1 Protein (His Tag)

Catalog Number:PKSH032530



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

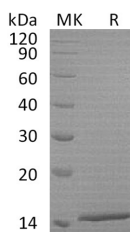
## Description

<b>Synonyms</b>	Hemoglobin subunit alpha;Alpha-globin;Hemoglobin alpha chain;HBA1;HBH;HBA-T3
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met 1-Arg142
<b>Accession</b>	P69905
<b>Calculated Molecular Weight</b>	16.7 kDa
<b>Observed molecular weight</b>	15 kDa
<b>Tag</b>	N-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 1mM EDTA, pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Hemoglobin subunit alpha 1 (HBA1), also known as  $\alpha 2\beta 2$ , is a hetero-tetramer consisting of two  $\alpha$  and two  $\beta$  subunits held together by non-covalent interactions. Each subunit contains a heme group with an iron atom in the Fe<sup>2+</sup> state. Cooperativity of Hemoglobin (Hb) in binding with O<sub>2</sub> and allosteric regulatory binding properties with CO<sub>2</sub>, H<sup>+</sup>, Cl<sup>-</sup>, 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  $\alpha$  and  $\beta$  chains have been found co-expressed in alveolar cells, mesangial cells of the kidney, retinal ganglion cells, hepatocytes and neurons.

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017

# Recombinant Human HBA1 Protein (His Tag)

Catalog Number: PKSH032530



Endothelial and peripheral catecholaminergic cells express exclusively the  $\alpha$  chain, while macrophages present the  $\beta$  chain only.

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017