

## Rabbit Anti-HBA1 antibody

SL0847R

**Product Name** HBA1

**Chinese Name** 血红蛋白  $\alpha 1/\alpha$ -Globin 抗体

**Alias** Alpha 1 globin; Alpha globin; Alpha one globin; Alpha-globin; HBA\_HUMAN; HBA2; Hemoglobin alpha 1; Hemoglobin alpha 1 chain; Hemoglobin alpha 1 globin chain; Hemoglobin alpha 2; Hemoglobin alpha chain; Hemoglobin subunit alpha; MGC126895; MGC12689.

**Research Area** Cardiovascular Cell type markers

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human (predicted:Rat,Monkey)  
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

**Applications** (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 15kDa

**Cellular localization** The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human HBA1: 56-141/141

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

The human alpha globin gene cluster located on chromosome 16 spans about 30 kb and includes seven loci: 5'- zeta - pseudozeta - mu - pseudoalpha-1 - alpha-2 - alpha-1 - theta - 3'. The alpha-2 (HBA2) and alpha-1 (HBA1) coding sequences are identical. These genes differ slightly over the 5' untranslated regions and the introns, but they differ significantly over the 3' untranslated regions. Two alpha chains plus two beta chains constitute HbA, which in normal adult life comprises about 97% of the total hemoglobin; alpha chains combine with delta chains to constitute HbA-2, which with HbF (fetal hemoglobin) makes up the remaining 3% of adult hemoglobin. Alpha thalassemias result from deletions of each of the alpha genes as well as deletions of both HBA2 and HBA1; some nondeletion alpha thalassemias have also been reported. [provided by RefSeq, Jul 2008]

**Function:**

Involved in oxygen transport from the lung to the various peripheral tissues.

**Subunit:**

Heterotetramer of two alpha chains and two beta chains in adult hemoglobin A (HbA); two alpha chains and two delta chains in adult hemoglobin A2 (HbA2); two alpha chains and two epsilon chains in early embryonic hemoglobin Gower-2; two alpha chains and two gamma chains in fetal hemoglobin F (HbF).

**Product  
Detail**

**Tissue Specificity:**

Red blood cells.

**Post-translational modifications:**

The initiator Met is not cleaved in variant Thionville and is acetylated.

**DISEASE:**

Defects in HBA1/HBA2 may be a cause of Heinz body anemias (HEIBAN) [MIM:140700]. This is a form of non-spherocytic hemolytic anemia of Dacie type 1. After splenectomy, which has little benefit, basophilic inclusions called Heinz bodies are demonstrable in the erythrocytes. Before splenectomy, diffuse or punctate basophilia may be evident. Most of these cases are probably instances of hemoglobinopathy. The hemoglobin demonstrates heat lability. Heinz bodies are observed also with the Ivemark syndrome (asplenia with cardiovascular anomalies) and with glutathione peroxidase deficiency.

**Similarity:**

Belongs to the globin family.

**SWISS:**

P69905

**Gene ID:**

3039



**Database links:**

[Entrez Gene: 3039](#) Human

[Entrez Gene: 3040](#) Human

[Omim: 141800](#) Human

[Omim: 141850](#) Human

[SwissProt: P69905](#) Human

[SwissProt: P01942](#) Mouse

[SwissProt: P01946](#) Rat