

# HBA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9414C

### **Product Information**

Application Primary Accession	WB, FC, E <u>P69905</u>
Other Accession	<u>P21767</u>
Reactivity	Human, Mouse
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	15258
Antigen Region	100-128

#### **Additional Information**

Gene ID	3039;3040
Other Names	Hemoglobin subunit alpha, Alpha-globin, Hemoglobin alpha chain, HBA1
Target/Specificity	This HBA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 100-128 amino acids from the Central region of human HBA2.
Dilution	WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HBA2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	HBA1
Function	Involved in oxygen transport from the lung to the various peripheral tissues.
Tissue Location	Red blood cells.

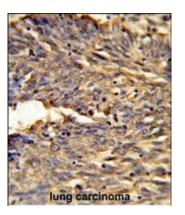
## Background

HBA2 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.

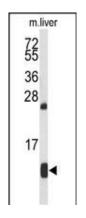
#### References

Sessa, R., et al. Am. J. Hematol. 85(2):143-144(2010) Sharma, V., et al. Hematology 14(5):297-300(2009) Waye, J.S., et al. Hemoglobin 33(6):519-522(2009) Roy, P., et al. Hemoglobin 33(6):486-491(2009) Joly, P., et al. Hemoglobin 33(3):196-205(2009)

#### Images

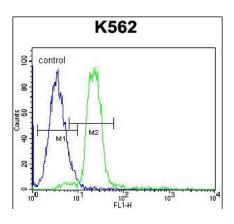


Formalin-fixed and paraffin-embedded human lung carcinoma reacted with HBA2 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Western blot analysis of HBA2 Antibody (Center) (Cat. #AP9414c) in mouse liver tissue lysates (35ug/lane). HBA2 (arrow) was detected using the purified Pab.

HBA2 Antibody (Center) (Cat. #AP9414c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.