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HBA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9414C

Specification

HBA2 Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	P69905
Other Accession	P21767
Reactivity	**Human, Mouse**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**100-128**

HBA2 Antibody (Center) - 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

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.

HBA2 Antibody (Center) - Protein Information

Name HBA1

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

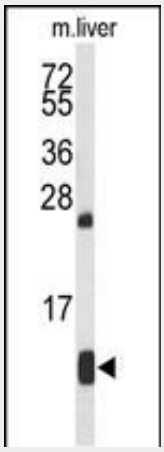
Tissue Location
Red blood cells.

HBA2 Antibody (Center) - Protocols

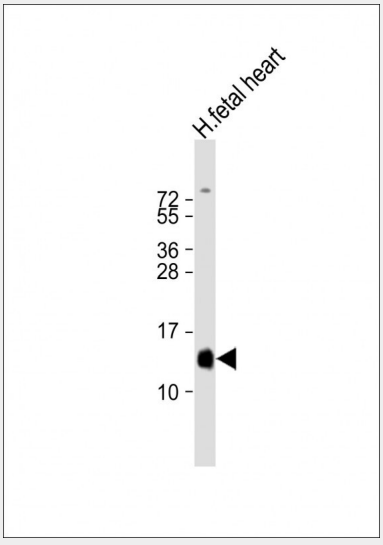
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HBA2 Antibody (Center) - Images

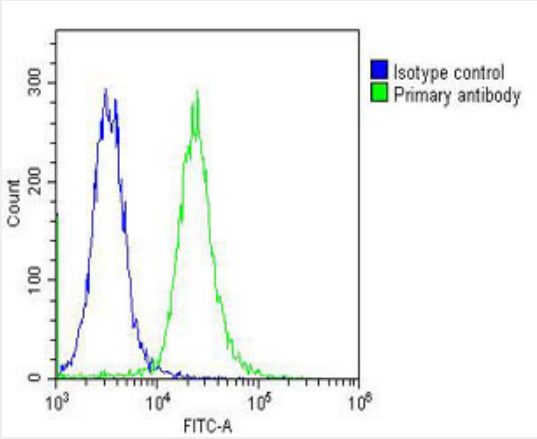


Western blot analysis of HBA2 Antibody (Center) (Cat. #AP9414c) in mouse liver tissue lysates (35ug/lane). HBA2 (arrow) was detected using the purified Pab.



Anti-HBA2 Antibody (Center) at 1:2000 dilution + human fetal heart lysate Lysates/proteins at 20

µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 15 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing K562 cells stained with AP9414c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP9414c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

HBA2 Antibody (Center) - 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.

HBA2 Antibody (Center) - 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)