

## Basic Information

Product Name	Anti-Hemoglobin/HBA1/HBA2 Antibody	
Gene Name	HBA1/HBA2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Hemoglobin recombinant protein (Position: V2-R142). Human Hemoglobin shares 85.8% amino acid (aa) sequence identity with mouse Hemoglobin.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	15 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

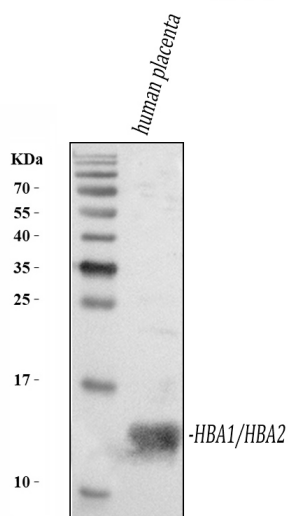
## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

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.

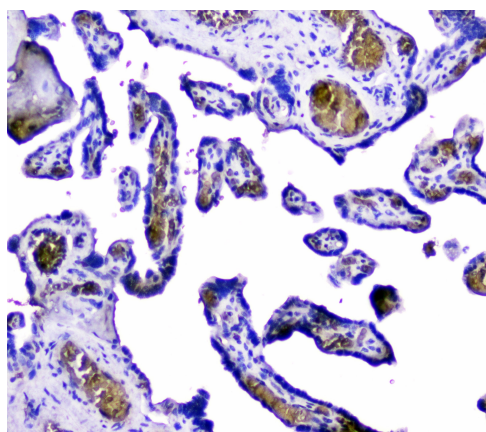
## Selected Validation Data



Western blot analysis of anti-Hemoglobin/HBA1/HBA2 antibody (A00233-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

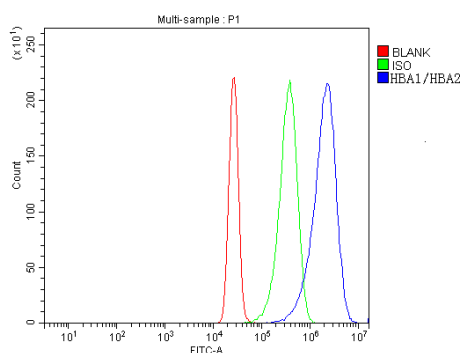
Lane 1: human placenta whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Hemoglobin/HBA1/HBA2 antigen affinity purified polyclonal antibody (A00233-1) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Hemoglobin/HBA1/HBA2 at approximately 15 kDa. The expected band size for Hemoglobin/HBA1/HBA2 is at 15 kDa.



IHC analysis of Hemoglobin/HBA1/HBA2 using anti-Hemoglobin/HBA1/HBA2 antibody (A00233-1).

Hemoglobin/HBA1/HBA2 was detected in a paraffin-embedded section of human placenta tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of K562 cells using anti-Hemoglobin/HBA1/HBA2 antibody (A00233-1).

Overlay histogram showing K562 cells stained with A00233-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Hemoglobin/HBA1/HBA2 Antibody (A00233-1, 1:100). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Product datasheet

## Anti-Hemoglobin/HBA1/HBA2 Antibody

**Catalog Number: A00233-1**



antibody and ELISA experts

**BOSTER BIOLOGICAL TECHNOLOGY**

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