

For Research Use Only

# Hemoglobin Alpha Recombinant antibody, PBS Only

Catalog Number: 83185-5-PBS



## Basic Information

<b>Catalog Number:</b> 83185-5-PBS	<b>GenBank Accession Number:</b> BC050661	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1 mg/ml	<b>GeneID (NCBI):</b> 3039	<b>CloneNo.:</b> 240049F12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P69905	
<b>Isotype:</b> IgG	<b>Full Name:</b> hemoglobin, alpha 1	
<b>Immunogen Catalog Number:</b> AG6040	<b>Calculated MW:</b> 15 kDa	
	<b>Observed MW:</b> 14-16 kDa, 27 kDa	

## Applications

**Tested Applications:**  
WB, FC (Intra), ELISA

**Species Specificity:**  
human

## Background Information

The hemoglobin molecule is a tetramer consisting of two alpha- and two beta-globin-like chains. HBA1 (hemoglobin alpha chain) protein is a alpha-type chain of hemoglobin encoded by two independent genes (HBA1 and HBA2) whose coding sequences are identical. Two alpha chains coupled with two beta chains constitute the adult hemoglobin (HbA or  $\alpha_2\beta_2$ ). HBA1 is also the component of fetal hemoglobin (HbF or  $\alpha_2\gamma_2$ ). This antibody detects a major band around 14-16 kDa in the western blot analysis of heart tissue and K-562 cells. A higher band around 26-27 kDa can also be observed occasionally, which may represent the dimer form of HBA1 (PMID: 20836851). This antibody may cross-react with other hemoglobin chains.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

For technical support and original validation data for this product please contact:

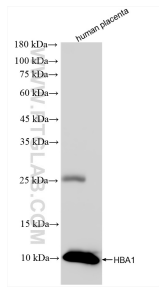
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

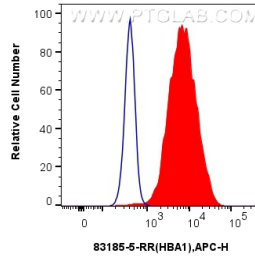
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

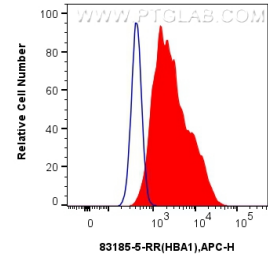
## Selected Validation Data



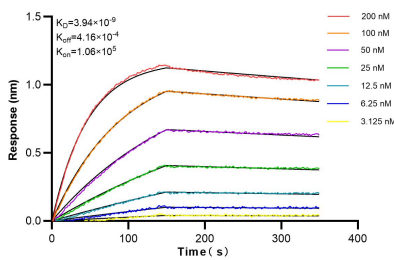
human placenta tissue were subjected to SDS PAGE followed by western blot with 83185-5-RR (HBA1 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83185-5-PBS in a different storage buffer formulation.



$1 \times 10^6$  K-562 cells were intracellularly stained with 0.25 ug Hba1 Recombinant Antibody (83185-5-RR, Clone:240049F12) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83185-5-PBS in a different storage buffer formulation.



$1 \times 10^6$  TF-1 cells were intracellularly stained with 0.25 ug Hba1 Recombinant Antibody (83185-5-RR, Clone:240049F12) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83185-5-PBS in a different storage buffer formulation.



Bi-layer interferometry (BLI) kinetic assays of 83185-5-RR against Human HBA1 were performed. The affinity constant is 3.94 nM.