

For Research Use Only

# Hemoglobin Alpha Recombinant antibody

Catalog Number: 83185-5-RR



## Basic Information

Catalog Number:

83185-5-RR

Concentration:

500 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG6040

GenBank Accession Number:

BC050661

GeneID (NCBI):

3039

UNIPROT ID:

P69905

Full Name:

hemoglobin, alpha 1

Calculated MW:

15 kDa

Observed MW:

14-16 kDa, 27 kDa

Purification Method:

Protein A purification

CloneNo.:

240049F12

Recommended Dilutions:

WB: 1:1000-1:5000

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

Tested Applications:

WB, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

WB : human placenta tissue,

FC (Intra) : K-562 cells, TF-1 cells

## 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 represents the dimer form of HBA1 (PMID: 20836851). This antibody may cross-react with other hemoglobin chains.

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

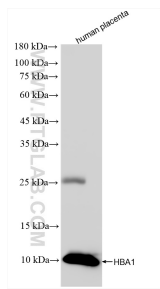
T: 4006900926

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

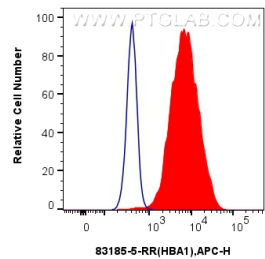
W: [ptgcn.com](http://ptgcn.com)

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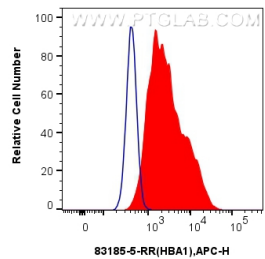
## Selected Validation Data



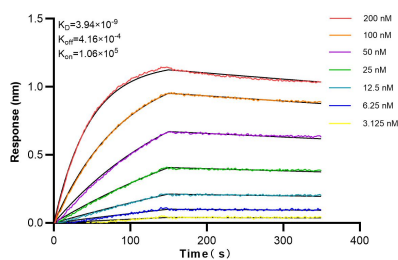
human placenta tissue were subjected to SDS PAGE followed by western blot with 83185-5-RR (HBA1 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



1x10<sup>6</sup> 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).



1x10<sup>6</sup> 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).



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