For Research Use Only

HBA1 Recombinant antibody

Catalog Number:83185-5-RR



Purification Method:

Protein A purfication

Recommended Dilutions:

WB 1:1000-1:5000

CloneNo.:

240049F12

Basic Information

Catalog Number: 83185-5-RR

Size: 500 μg/ml Source: Rabbit Isotype:

Immunogen Catalog Number: AG6040

Tested Applications: WB, FC (Intra), ELISA Species Specificity:

human

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

Positive Controls:

WB: human placenta tissue,

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 α 2 β 2). HBA1 is also the component of fetal hemoglobin (HbF or α 2 γ 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). The antibody is specific to HBA1 and has no cross reaction to other globin member.

Storage

Applications

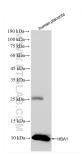
Storage:

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

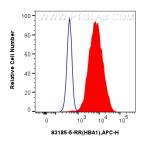
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

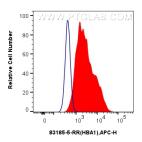
Selected Validation Data



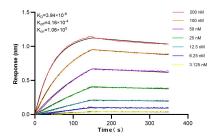
human placenta tissue were subjected to SDS PAGE followed by western blot with 83185-5-RR (HBA1 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



1x10^6 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).



1x10^6 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).



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