For Research Use Only

Hemoglobin Alpha Recombinant antibody

Catalog Number:83185-5-RR



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method: Protein A purfication

83185-5-RR

GeneID (NCBI):

100ul , Concentration: 500 $\mu g/ml$ by

CloneNo.:

Nanodrop:

UNIPROT ID:

BC050661

240049F12

P69905

Recommended Dilutions: WB 1:1000-1:5000

Rabbit

Full Name: hemoglobin, alpha 1

Isotype: IgG

Calculated MW:

Immunogen Catalog Number: AG6040

15 kDa

Observed MW: 14-16 kDa, 27 kDa

Applications

Tested Applications: WB, FC (Intra), ELISA Positive Controls:

Species Specificity:

human

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 $\alpha 2\beta 2$). 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). The antibody is specific to HBA1 and has no cross reaction to other globin member.

Storage

Storage:

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

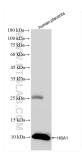
Storage Buffer:

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

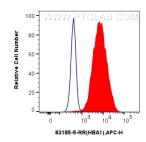
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

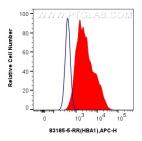
Selected Validation Data



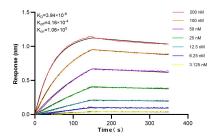
human placenta tissue were subjected to SDS PAGE followed by western blot with 83185-5-RR (HBA1 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



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.