

# Hemoglobin Alpha-Specific Polyclonal antibody

Catalog Number: 19990-1-AP

## Basic Information

**Catalog Number:**

19990-1-AP

**Size:**

500 ug/ml

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

NM\_000558

**GeneID (NCBI):**

3039

**UNIPROT ID:**

P69905

**Full Name:**

hemoglobin, alpha 1

**Calculated MW:**

16 kDa

**Observed MW:**

14-16 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IHC 1:50-1:500

## Applications

**Tested Applications:**

WB, IHC, ELISA

**Species Specificity:**

human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** human placenta tissue, human heart tissue, human spleen tissue

**IHC :** human colon,

## 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:**

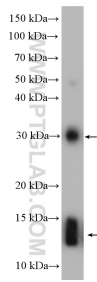
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

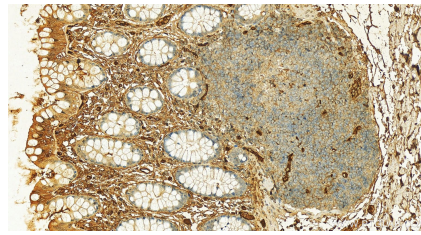
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



human placenta tissue were subjected to SDS PAGE followed by western blot with 19990-1-AP (HBA1-Specific antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon slide using 19990-1-AP (Hemoglobin Alpha-Specific antibody) at dilution of 1:100 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).