

# Anti-Hemoglobin (MOUSE) Monoclonal Antibody

**Hemoglobin Antibody** Catalog # ASR5931

## **Specification**

## Anti-Hemoglobin (MOUSE) Monoclonal Antibody - Product Information

Host Mouse

Conjugate **Unconjugated Target Species** Human

Reactivity Human Clonality Monoclonal Application WB, E, I, LCI

**Application Note Anti-Hemoglobin (whole molecule)** 

(MOUSE) antibody has been tested by ELISA and western blot. This antibody is designed for use in lateral flow and western blot. Specific conditions of

reactivity should be optimized by the end user. Expect a band of approximately 16

kDa.

**Physical State Liquid (sterile filtered)** 

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

**Immunogen** Anti-Hemoglobin (whole molecule)

Monoclonal Antibody was produced in mice

by repeated immunizations with a

synthetic peptide corresponding to amino acid residues near the N-terminus of Hb

**B-subunit conjugated to KLH.** 

Preservative 0.01% (w/v) Sodium Azide

## Anti-Hemoglobin (MOUSE) Monoclonal Antibody - Additional Information

### **Purity**

This protein A purified mouse monoclonal antibody reacts specifically with human Hemoglobin. Anti-Hemoglobin is purified from tissue culture supernatant by protein A purification.

# **Storage Condition**

Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.

## **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-Hemoglobin (MOUSE) Monoclonal Antibody - Protein Information

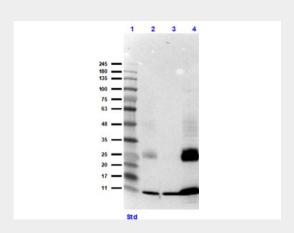


## Anti-Hemoglobin (MOUSE) Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-Hemoglobin (MOUSE) Monoclonal Antibody - Images



Western Blot of Mouse Anti-Hemoglobin Antibody. Lane 1: Opal Prestained Molecular Weight (p/n MB-210-0500). Lane 2: Human rec Hemoglobin (Hb) [0.1  $\mu$ g]. Lane 3: Human Hemoglobin beta S (HbS) [0.1  $\mu$ g]. Lane 4: Human Heart Whole Cell Lysate [10  $\mu$ g]. Primary Antibody: Mouse Anti-Hemoglobin Antibody at 1.0  $\mu$ g/mL overnight at 2-8°C. Secondary Antibody: Rabbit Anti-Mouse IgG (gamma 1, 2a, 2b and 3 chain) Antibody Peroxidase Conjugated (p/n 610-403-C46) for 30min at RT. Blocking Buffer: BlockOut® - Universal Blocking Buffer for Western Blotting (p/n MB-073) for 1hr at RT. Predicted MW: ~16kDa. Observed MW: monomer, dimer. Exposure: 2.9 sec.

# Anti-Hemoglobin (MOUSE) Monoclonal Antibody - Background

Hemoglobin antibody detects the hemoglobin tetramer composed of alpha and beta subunits. Functional adult hemoglobin (Hb) is a hetero tetramer composed of 2 alpha and 2 beta subunits ( $\alpha 2\beta 2$ ). Common isoform variants of hemoglobin include HbA, HbS, HbC, and HbA-2. Sickle cell disease (SCD), thalassemias and hemoglobinopathies occur when aberrant forms of hemoglobin are expressed in children and adults. Globin gene mutations affect the structure and expression levels of Hb. Sickle cell disease and the more benign sickle cell trait are observed in more than 100 million people globally. Perhaps the most significant mutation is the E6V in the beta subunit and the cause of SCD, but other relevant isoforms of Hb are observed. Hemoglobin antibody reacts whole hemoglobin tetramer. This antibody is ideal for investigators involved in Cardiovascular and developmental biology research.