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Anti-HbA-2 (MOUSE) Monoclonal Antibody
Hemoglobin beta A-2 Antibody
Catalog # ASR4246

Specification

Anti-HbA-2 (MOUSE) Monoclonal Antibody - Product Information

Host	**Mouse**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Monoclonal**
Application	**WB, E, I, LCI**
Application Note	**Anti-Hemoglobin beta A-2 (MOUSE) antibody has been tested by ELISA and Western Blotting. This antibody is designed for use in lateral flow. 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 beta A-2 Monoclonal Antibody was produced in mice by repeated immunizations with synthetic peptide corresponding to amino acid residues near the N-terminus of Hb δ-subunit conjugated to KLH.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-HbA-2 (MOUSE) Monoclonal Antibody - Additional Information

Gene ID 3045

Other Names
3045

Purity
This protein A purified mouse monoclonal antibody reacts specifically with human HbA-2 delta isoform. Anti-HbA-2 is purified from tissue culture supernatant by protein A purification. Blast analysis shows 100% homology to Human, Pan troglodytes, Pan paniscus, Gorilla gorilla gorilla, and Hylobates lar. This antibody does not react with the HbA, HbS, HbC, or HbF isoforms.

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.

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Anti-HbA-2 (MOUSE) Monoclonal Antibody - Protein Information

Name HBD

Function
Involved in oxygen transport from the lung to the various peripheral tissues.

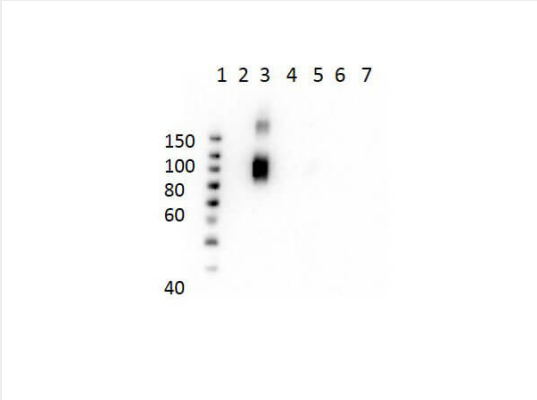
Tissue Location
Red blood cells.

Anti-HbA-2 (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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-HbA-2 (MOUSE) Monoclonal Antibody - Images



Western Blot of Mouse Anti-Hemoglobin beta A-2 Antibody. Lane 1: Molecular Weight Ladder. Lane 2: HbA peptide conjugated to BSA. Lane 3: HbA-2 peptide conjugated to BSA. Lane 4: HbC peptide conjugated to BSA. Lane 5: HbF peptide conjugated to BSA. Lane 6: HbS peptide conjugated to BSA. Lane 7: BSA alone. Load: 50ng per lane. Primary antibody: Anti-HbA-2 antibody at 1 µg/mL overnight at 4°C. Secondary antibody: Rabbit Anti-Mouse secondary antibody at 1:40,000 for 30 min at RT. Block: MB-073 for 30 min RT. Predicted/Observed: Reactivity seen in Lane 3 specific to HbA-2 only.

Anti-HbA-2 (MOUSE) Monoclonal Antibody - Background

HbA-2 or hemoglobin delta subunit antibodies detect the delta-specific sequence in the hemoglobin delta-subunit found in HbA-2. Functional hemoglobin (Hb) is a hetero tetramer and the dominant form of Adult Hb is composed of 2 alpha and 2 beta subunits (α2β2). Hemoglobin A-2 (HbA-2) is a normal but minor variant of hemoglobin A that consists of two alpha and two delta chains (α2δ2).

Hemoglobin A-2 may be increased in beta thalassemia or in people who are heterozygous for the beta thalassemia gene, and HbA2 is also linked to neurological disorders. HbA-2 form exists in small amounts in all adult humans (1.5-3.1% of all hemoglobin molecules) and is increased in people with Sickle-cell disease. Its normal biological role is not well understood. HbA-2 antibody does not react other forms of Hb including no cross-reaction to HbA or beta subunit. This antibody is ideal for investigators involved in Cardiovascular and developmental biology research.