

Datasheet for 200-301-MV4**Hemoglobin Antibody****Overview**

Description:	Anti-Hemoglobin (MOUSE) Monoclonal Antibody - 200-301-MV4
Item No.:	200-301-MV4
Size:	100 µg
Applications:	ELISA, WB, LFA
Reactivity:	Human
Host Species:	Mouse

Product Details

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.
Synonyms:	Sickle Cell Disease (SCD), mouse anti-hemoglobin antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	2B7.G10.H12
Format:	IgG1

Target Details

Gene Name:	HBA, HBB
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
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 β -subunit conjugated to KLH.
Purity/Specificity:	This protein A purified mouse monoclonal antibody reacts specifically with human Hemoglobin. Anti-Hemoglobin is purified from tissue culture supernatant by protein A purification.
Relevant Links:	• 200-301-MV4 SDS

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	LFA (Based on references)
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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
WB:	User Optimized

Formulation

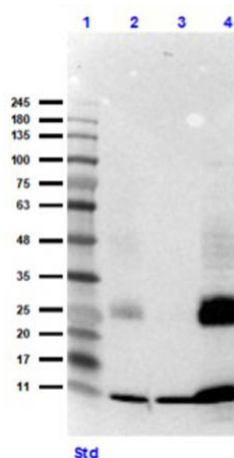
Physical State:	Liquid (sterile filtered)
Concentration:	0.989 by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Mouse Anti-Hemoglobin Antibody.

Lane 1: Opal Prestained Molecular Weight (p/n MB-210-0500).

Lane 2: Human rec Hemoglobin (Hb) [0.1µg].

Lane 3: Human Hemoglobin beta S (HbS) [0.1µg].

Lane 4: Human Heart Whole Cell Lysate [10µg].

Primary Antibody: Mouse Anti-Hemoglobin Antibody at 1.0µg/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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.