

Product datasheet for **TA396793**

hemoglobin subunit gamma 1 (HBG1) Mouse Monoclonal Antibody [Clone ID: 4B3.B5.F3.B7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	4B3.B5.F3.B7
Applications:	ELISA, WB
Recommended Dilution:	WB: 1ug/mL ELISA: 1:20,000
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	Anti-Hemoglobin beta F Monoclonal Antibody was produced in mice by repeated immunizations with synthetic peptide corresponding to amino acid residues near the N-terminus of Hb β -subunit conjugated to KLH.
Specificity:	This protein A purified mouse monoclonal antibody reacts specifically with human HbF gamma isoform. Anti-HbF is purified from tissue culture supernatant by protein A purification. Blast analysis shows 100% homology to Human, Pan troglodytes, Pan paniscus, Gorilla gorilla gorilla, Hylobates lar, Macaca nemestrina, Macaca mulatta, Pongo pygmaeus, Pongo pygmaeus, Macaca fuscata fuscata, and Papio cynocephalus. This antibody does not react with the HbA, HbS, HbC, or HbA-2 isoforms.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.0mg/ml - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 μ L). To minimize loss of volume dilute 1:10 by adding 225 μ L of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.
Gene Name:	hemoglobin subunit gamma 1



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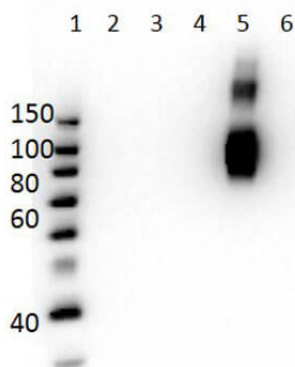
Database Link: [Entrez Gene 3047 Human P69891](#)

Background: HbF antibodies detect the hemoglobin gamma isoform subunit. Functional alternate hemoglobin (Hb) is a hetero tetramer composed of 2 alpha and 2 gamma subunits (alpha-2 gamma-2). Hemoglobin F is elevated in newborns, reaching adult levels by 12 months. HbF levels are increased to as much as 5% to 10% in normal pregnancy. Sickle cell disease (SCD), thalassemias and hemoglobinopathies occur when aberrant forms of hemoglobin are expressed in children and adults. Hemoglobin variants arise from mutations in the globin genes and sickle cell disease and the more benign sickle cell trait are observed in more than 100 million people globally. HbF antibody does not react other forms of Hb. This antibody is ideal for investigators involved in Cardiovascular and developmental biology research.

Synonyms: mouse anti-HbF antibody, mouse anti-hemoglobin antibody, Gamma-1-globin, Hb F Agamma, Hemoglobin gamma-1 chain, Hemoglobin gamma-A chain, HBG1, HBG2, HbF Antibody, Sickle Cell Disease (SCD)

Note: Anti-Hemoglobin beta F (MOUSE) antibody has been tested 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.

Product images:



Western Blot of Mouse Anti-Hemoglobin beta F 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. Load: 50ng per lane. Primary antibody: Anti-HbF antibody at 1µg/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 5 specific to HbF only.