



# HBB Monoclonal Antibody

<b>Catalog No</b>	BYmab-07320
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB
<b>Gene Name</b>	HBB
<b>Protein Name</b>	Hemoglobin subunit beta (Beta-globin) (Hemoglobin beta chain) [Cleaved into: LVV-hemorphin-7]
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	HBB Monoclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	16kD
<b>Cell Pathway</b>	extracellular region,cytosol,hemoglobin complex,integral component of membrane,haptoglobin-hemoglobin complex,extracellular exosome,endocytic vesicle lumen,blood microparticle,
<b>Tissue Specificity</b>	Red blood cells.
<b>Function</b>	disease:Defects in HBB are the cause of beta-thalassemia [MIM:141900, 604131]. The thalassemias are the most common monogenic diseases and occur mostly in Mediterranean and Southeast Asian populations. The hallmark of beta-thalassemia is an imbalance in globin-chain production in the adult HbA molecule. Absence of beta chain causes beta(0)-thalassemia, while reduced amounts of detectable beta globin causes beta(+)-thalassemia. In the severe forms of beta-thalassemia, the excess alpha globin chains accumulate in the developing erythroid precursors in the marrow. Their deposition leads to a vast increase in erythroid apoptosis that in turn causes ineffective erythropoiesis and severe microcytic hypochromic anemia. Clinically, beta-thalassemia is divided into

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thalassemia major (transfusion dependent), thalassemia intermedia (of intermediate severity), and thalassemia minor (asymptomatic).,d

#### Background

The alpha (HBA) and beta (HBB) loci determine the structure of the 2 types of polypeptide chains in adult hemoglobin, Hb A. The normal adult hemoglobin tetramer consists of two alpha chains and two beta chains. Mutant beta globin causes sickle cell anemia. Absence of beta chain causes beta-zero-thalassemia. Reduced amounts of detectable beta globin causes beta-plus-thalassemia. The order of the genes in the beta-globin cluster is 5'-epsilon -- gamma-G -- gamma-A -- delta -- beta-3'. [provided by RefSeq, Jul 2008],

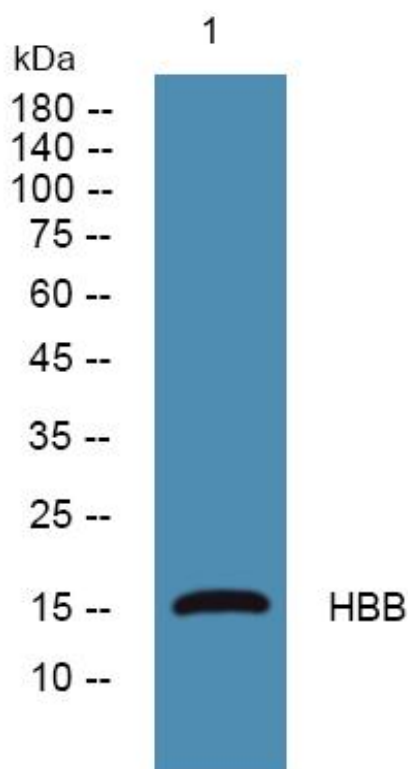
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using HBB Monoclonal Antibody