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HBB Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant HBB.
Catalog # AT2322a

Product Information

Application	WB, IHC, E
Primary Accession	P68871
Other Accession	BC007075
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	7B12
Calculated MW	15998

Additional Information

Gene ID	3043
Other Names	Hemoglobin subunit beta, Beta-globin, Hemoglobin beta chain, LVV-hemorphin-7, Spinorphin, HBB
Target/Specificity	HBB (AAH07075, 38 a.a. ~ 147 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	HBB Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

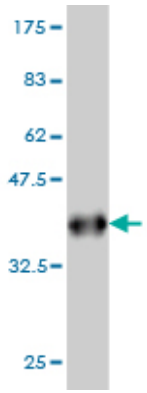
The alpha (HBA) and beta (HBB) loci determine the structure of the 2 types of polypeptide chains in adult hemoglobin, Hb A. The normal adult hemoglobin tetramer consists of two alpha chains and two beta chains. Mutant beta globin causes sickle cell anemia. Absence of beta chain causes beta-zero-thalassemia. 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'.

References

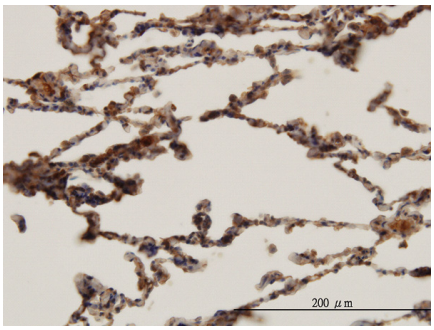
1.A Synthetic Model of Human Beta-Thalassemia Erythropoiesis Using CD34+ Cells from Healthy Adult

Donors.Lee YT, Kim KS, Byrnes C, de Vasconcellos JF, Noh SJ, Rabel A, Meier ER, Miller JLPLoS One. 2013 Jul 8;8(7):e68307. doi: 10.1371/journal.pone.0068307. Print 2013.2.Hemoglobin alpha and beta are ubiquitous in the human lung, decline in idiopathic pulmonary fibrosis but not in COPD.Ishikawa N, Ohlmeier S, Salmenkivi K, Myllarniemi M, Rahman I, Mazur W, Kinnula VL.Respir Res. 2010 Sep 13;11:123.

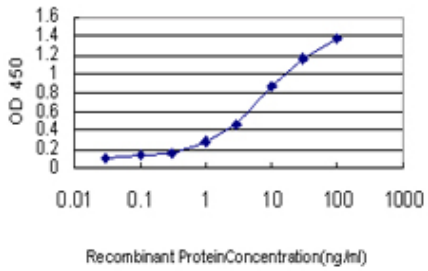
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



Immunoperoxidase of monoclonal antibody to HBB on formalin-fixed paraffin-embedded human lung. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged HBB is approximately 0.1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.