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HOXB5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant HOXB5.
Catalog # AT2410a

Product Information

Application	WB, E
Primary Accession	P09067
Other Accession	NM_002147
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3F10
Calculated MW	29434

Additional Information

Gene ID	3215
Other Names	Homeobox protein Hox-B5, Homeobox protein HHOC10, Homeobox protein Hox-2A, Homeobox protein Hu-1, HOXB5, HOX2A
Target/Specificity	HOXB5 (NP_002138.1, 170 a.a. ~ 267 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 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	HOXB5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

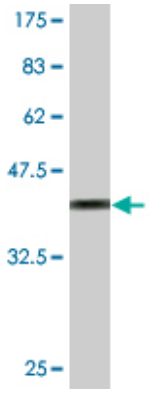
Background

This gene is a member of the Antp homeobox family and encodes a nuclear protein with a homeobox DNA-binding domain. It is included in a cluster of homeobox B genes located on chromosome 17. The encoded protein functions as a sequence-specific transcription factor that is involved in lung and gut development. Increased expression of this gene is associated with a distinct biologic subset of acute myeloid leukemia (AML) and the occurrence of bronchopulmonary sequestration (BPS) and congenital cystic adenomatoid malformation (CCAM) tissue.

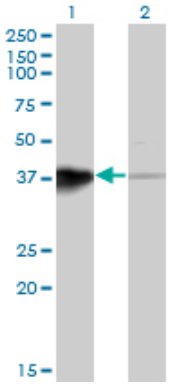
References

DNA methylation profiling of ovarian carcinomas and their in vitro models identifies HOXA9, HOXB5, SCGB3A1, and CRABP1 as novel targets. Wu Q, et al. Mol Cancer, 2007 Jul 10. PMID 17623056.The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.Expression of Hoxb-5 during human lung development and in congenital lung malformations. Volpe MV, et al. Birth Defects Res A Clin Mol Teratol, 2003 Aug. PMID 14632303.HOXB5 expression is spatially and temporarily regulated in human embryonic gut during neural crest cell colonization and differentiation of enteric neuroblasts. Fu M, et al. Dev Dyn, 2003 Sep. PMID 12950074.HoxB5 is an upstream transcriptional switch for differentiation of the vascular endothelium from precursor cells. Wu Y, et al. Mol Cell Biol, 2003 Aug. PMID 12897140.

Images

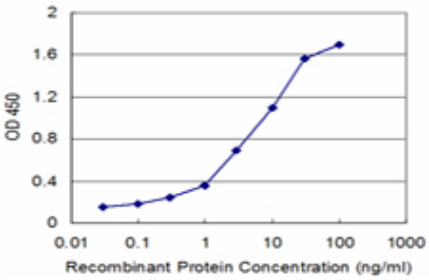


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.52 KDa) .



Western Blot analysis of HOXB5 expression in transfected 293T cell line by HOXB5 monoclonal antibody (M01), clone 3F10.

Lane 1: HOXB5 transfected lysate(29.4 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged HOXB5 is approximately 0.1ng/ml as a capture antibody.