10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HOXB4 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1928a

Product Information

Application	WB, IHC, E
Primary Accession	P17483
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3A2F2
Isotype	IgG2a
Calculated MW	27604
Description	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 development. Intracellular or ectopic expression of this protein expands hematopoietic stem and progenitor cells in vivo and in vitro, making it a potential candidate for therapeutic stem cell expansion.
Immunogen	Purified recombinant fragment of human HOXB4 (AA: 16-251) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide.

Additional Information

Gene ID	3214
Other Names	Homeobox protein Hox-B4, Homeobox protein Hox-2.6, Homeobox protein Hox-2F, HOXB4, HOX2F
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HOXB4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HOXB4

Synonyms	HOX2F
Function	Sequence-specific transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis.
Cellular Location	Nucleus.

Background

The protein encoded by this gene is an isozyme of very long-chain acyl-CoA synthetase (VLCS). It is capable of activating very long-chain fatty-acids containing 24- and 26-carbons. It is expressed in liver and associated with endoplasmic reticulum but not with peroxisomes. Its primary role is in fatty acid elongation or complex lipid synthesis rather than in degradation. This gene has a mouse ortholog. ; ;

References

1. Blood. 2012 May 10;119(19):e139-47. 2. J Cancer Res Clin Oncol. 2012 Feb;138(2):293-300.

Images

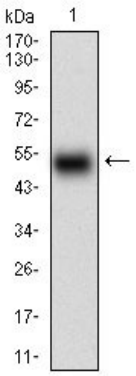


Figure 1: Western blot analysis using HOXB4 mAb against human HOXB4 (AA: 16-251) recombinant protein. (Expected MW is 51.9 kDa)

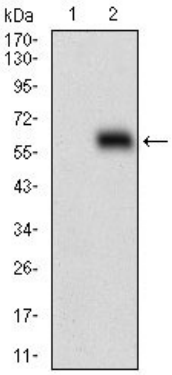


Figure 2: Western blot analysis using HOXB4 mAb against HEK293 (1) and HOXB4 (AA: 16-251)-hIgGFc transfected HEK293 (2) cell lysate.

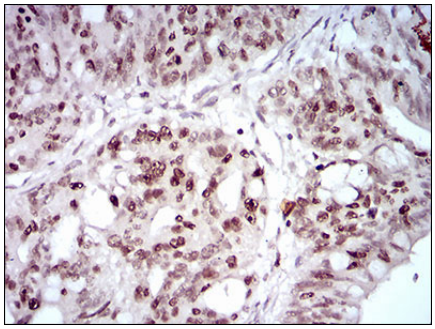
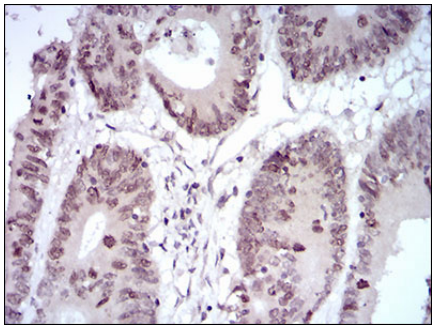


Figure 3: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using HOXB4 mouse mAb with DAB staining.

Figure 4: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using HOXB4 mouse mAb with DAB staining.



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