



Qty: 100µg/400 µL

Rabbit anti-HOXB7

Catalog No. 40-2000

Lot No.

Rabbit anti-HOXB7

FORM

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

PAD: ZMD.439

IMMUNOGEN

Synthetic peptide derived from the C-terminal region of the human HOXB7 (homeobox B7, homeobox C1) protein

SPECIFICITY

This antibody reacts with the human HOXB7 protein. On Western blots, it identifies the target band at ~24 kDa.

REACTIVITY

Reactivity has been confirmed with human A375, NTERA (NT2/D1), SK-MEL-19, KARPAS 299, SW480 and HT-29 cell lysates. Based on amino acid sequence homology, reactivity with mouse and bovine HOXB7 is expected.

Sample	Western Blotting	Immuno-fluorescence	Immuno-precipitation
Human	+++	+++	0*
Mouse	ND	ND	ND
Bovine	ND	ND	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

*No reactivity observed under conditions tested.

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1-3 µg/mL

Immunofluorescence: 5-6 µg/mL

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI402000

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BACKGROUND

The homeobox genes encode transcription factors that regulate developmental processes such as body patterning and organogenesis.¹ The mammalian HOX gene complex consists of 39 genes that are located on 4 linkage groups (clusters), dispersed over 4 chromosomes (HOXA, HOXB, HOXC and HOXD).

HOXB7 is expressed in most malignant T-cell lines and CD4-positive peripheral blood cells², and is constitutively expressed in both melanoma primary lesions and cell lines³. HOXB7 binds to and transactivates bFGF in melanoma cell lines but SkBr3 breast adenocarcinoma is negative for the expression of both HOXB7 and bFGF genes.⁴ HOXB7 may be a key activator of tumor-associated neoangiogenesis.⁵

REFERENCES

1. Krumlauf R. *Cell* 78:191-201,1994.
2. Inamori K, et al. *Biochem Biophys Res Commun* 196:203-208, 1993.
3. Care A, et al. *Mol Cell Biol* 16:4842-4851, 1996.
4. Lacroix A, et al. *Cancer Res* 50:5731-5734, 1990.
5. Care A, et al. *Cancer Res* 61:6532-6539, 2001.

RELATED PRODUCTS

<u>Product</u>	<u>Conjugate</u>	<u>Cat. No.</u>
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

<u>Conjugate</u>	<u>ZyMAX™ Goat x Rabbit IgG (H+L)</u>	<u>ZyMAX™ Goat x Mouse IgG (H+L)</u>
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

Zymed® and ZyMAX™ are trademarks of Zymed Laboratories Inc. Cy™ and Sepharose® are trademarks of Amersham Biosciences Ltd.

For Research Use Only

MZ050124

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI402000

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.