



Qty: 100 µg/200 µL

Mouse anti-KLF6 sv1

Catalog No. 39-6900

Lot No.

## Mouse anti-KLF6 sv1

### FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

**CLONE:** 9A2

**ISOTYPE:** Mouse IgG2a-kappa

### IMMUNOGEN

Recombinant protein derived from the internal region of the human KLF6 splice variant 1, which shares 85% homology with mouse and rat

### SPECIFICITY

This antibody is specific for KLF6 (Kruppel-like factor 6, ZF9, BCD1, CPBP, PAC1 ST12, COPEB) splice variant 1. On Western blots, it identifies the target band at ~26 kDa.

### REACTIVITY

Reactivity has been confirmed with recombinant human KLF6 sv1 protein by Western blotting, transfected cells overexpressing KLF6 sv1 by immunofluorescence, and paraffin-embedded and frozen prostate, colon, ovarian, head and neck, pancreatic, and breast cancer tissues by immunohistochemistry. Based on amino acid sequence homology, reactivity with mouse and rat may be observed.

Sample	ELISA	Western Blotting	Immuno-histochemistry (paraffin)*	Immuno-histochemistry (frozen)	Immuno-fluorescence
Human	ND	+++	++	++	+
Mouse	ND	ND	ND	ND	ND
Rat	ND	ND	ND	ND	ND
Immunogen	+++	NA	NA	NA	NA

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

### 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.

<b>ELISA:</b>	0.1 – 1.0 µg/mL
<b>Western Blotting:</b>	1 µg/mL
<b>Immunofluorescence:</b>	10 µg/mL
<b>Immunohistochemistry*:</b>	5-10 µg/mL

\*For immunohistochemistry in paraffin-embedded tissues, heat induced epitope retrieval (HIER) with citrate buffer, pH 6.0, is required prior to staining.

### 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](http://www.invitrogen.com)

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

PI396900

(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](http://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**

KLF6, also known as GBF, ZF9, BCD1, CPBP, PAC1 ST12, and COPEB, is a member of the Kruppel-like group of transcription factors, which participate in a wide variety of biological functions, including carcinogenesis. KLF6 encodes a nuclear protein that contains three C-terminal zinc fingers, a serine/threonine-rich central region and an acidic domain in the N-terminal region<sup>1-2</sup>.

KLF6 is a key tumor suppressor gene that is often mutated, decreased or lost in prostate tumor samples<sup>3</sup>. A common germline single nucleotide polymorphism is associated with the production of three alternatively spliced, dominant negative KLF6 isoforms. Although wild-type KLF6 acts as a tumor suppressor, KLF6 splice variant 1 (sv1) has the opposite effect on cell proliferation, colony formation and invasion. Inhibition of KLF6 sv1 with short interfering RNA reduces tumor cell growth by 50% and decreases the number of growth and angiogenesis-related genes. These findings illustrate a dynamic and functional antagonism between wild-type KLF6 and the splice variant KLF6 sv1 in prostate tumor growth<sup>4</sup>.

**REFERENCES**

1. El Roubi S, et al. *Oncogene* 13:2623-2630, 1996.
2. Ratziu V, et al. *PNAS* 95:9500-9505, 1998.
3. Narla G, et al. *Science* 294:2563-2566, 2001.
4. Narla G, et al. *Cancer Res* 65:5761-5768, 2005.

**RELATED PRODUCTS**

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

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

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

**For Research Use Only**

AC060214

[www.invitrogen.com](http://www.invitrogen.com)

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

PI396900

(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](http://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.