

# ZYMED® Laboratories

invitrogen immunodetection

Qty: 100µg/400 µL

Rabbit anti-Kremen2

Catalog No. 38-1700

Lot No.

## Rabbit anti-Kremen2

### 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.346

### IMMUNOGEN

Synthetic peptide derived from the internal region of human, mouse and rat Kremen2 proteins.

### SPECIFICITY

This antibody reacts with human, mouse and rat Kremen2 proteins. On Western blots, it identifies a band at ~51 kDa. This antibody exhibits no cross-reactivity with the related Kremen1 protein.

### REACTIVITY

Reactivity has been confirmed with myc-tagged mouse Kremen2-transfected 293T cell lysates. Based upon 100% amino acid conservation at this sequence, reactivity with human and rat is expected.

| Sample | Western Blotting |
|--------|------------------|
| Mouse  | +++              |
| Rat    | ND               |
| Human  | ND               |

(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.

**Western Blotting:** 0.1-2 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)

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**BACKGROUND**

The Wnt family of secreted glycoproteins mediate cell-cell interaction during cell growth and differentiation in both embryos and adults.<sup>1,2</sup> Canonical Wnt signaling by way of the  $\beta$ -catenin pathway is transduced by two receptor families, frizzled proteins and lipoprotein-receptor-related proteins 5 and 6 (LRP5/6) which binds Wnts and transmit their signal by stabilizing intracellular  $\beta$ -catenin.<sup>3-6</sup> Kremen1 and Kremen2 are high-affinity Dkk1 receptors that functionally cooperate with the secreted protein Dickkopf1 (Dkk1) to block Wnt/ $\beta$ -catenin signaling.<sup>7</sup> Kremen1 and Kremen2 are components of a membrane complex modulating canonical Wnt signaling through LRP6 in vertebrates.<sup>7</sup> Dkk1 has been shown to inhibit Wnt signaling by binding to and antagonizing LRP5/6.<sup>8-10</sup>

**REFERENCES**

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9. Mao B, et al. *Nature* 411:321-325, 2001.
10. Semenov MV, et al. *Curr Biol* 11:951-961, 2001.

**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                                         |

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