

## **MEK Kinase-4 Polyclonal Antibody**

Cat #: ABP55231 Size: 30µl /100µl /200µl

## **Product Information**

|     | Product Name: MEK Kinase-4 Polyclonal Antibody                       |     |                                    |
|-----|--|-----|------------------------------------|
|     | Applications: IHC-P, ELISA   |     | Isotype: Rabbit IgG                |
|     | Reactivity: Human, Mouse   |     |                                    |
| REF | Catalog Number: ABP55231   | LOT | Lot Number: Refer to product label |
|     | Formulation: Liquid  |     | Concentration: 1 mg/ml             |
| Ĵ   | <b>Storage:</b> Store at -20°C. Avoid repeated freeze / thaw cycles. |     | Note: Contain sodium azide.        |

**Background:** The central core of each mitogen-activated protein kinase (MAPK) pathway is a conserved cascade of 3 protein kinases: an activated MAPK kinase kinase (MAPKKK) phosphorylates and activates a specific MAPK kinase (MAPKK), which then activates a specific MAPK. While the ERK MAPKs are activated by mitogenic stimulation, the CSBP2 and JNK MAPKs are activated by environmental stresses such as osmotic shock, UV irradiation, wound stress, and inflammatory factors. This gene encodes a MAPKKK, the MEKK4 protein, also called MTK1. This protein contains a protein kinase catalytic domain at the C terminus. The N-terminal nonkinase domain may contain a regulatory domain. Expression of MEKK4 in mammalian cells activated the CSBP2 and JNK MAPK pathways, but not the ERK pathway. In vitro kinase studies indicated that recombinant MEKK4 can specifically phosphorylate and activate PRKMK6 and SERK1, MAPKKs that activate CSBP2 and JNK, respectively but cannot phosphorylate PRKMK1, an MAPKK that activates ERKs. MEKK4 is a major mediator of environmental stresses that activate the CSBP2 MAPK pathway, and a minor mediator of the JNK pathway. Several alternatively spliced transcripts encoding distinct isoforms have been described.

**<u>Application Notes</u>**: Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: IHC-P (1:100-1:300), ELISA (1:5000). Not yet tested in other applications.

**<u>Storage Buffer</u>**: PBS containing 50% Glycerol, 0.5% BSA and 0.02% Sodium Azide.

**Storage Instructions:** Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.



