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# MAPK4 Rabbit pAb

Catalog # AP98331

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | P31152 |
| **Other Accession** | P31152 |
| **Reactivity** | Rat, Human |
| **Predicted** | Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 65922 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human MAPK4 |
| **Epitope Specificity** | 21-130/587 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.Contains 1 protein kinase domain. |
| **SUBUNIT** | Homodimer. Heterodimer with ERK3/MAPK6. Interacts with (via FRIEDE motif) MAPKAPK5. |
| **Post-translational modifications** | Phosphorylated at Ser-186 by PAK1, PAK2 and PAK3 resulting in catalytic activation. Phosphorylated by MAPKAPK5 at other sites. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Mitogen-activated protein kinase 4 is a member of the mitogen-activated protein kinase family. Tyrosine kinase growth factor receptors activate mitogen-activated protein kinases which then translocate into the nucleus where it phosphorylates nuclear targets. [provided by RefSeq, Jul 2008] |

## Additional Information

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| **Gene ID** | 5596 |
| **Other Names** | ERK-4; ERK4; PRKM4; p63-MAPK; p63MAPK; A330097D03Rik; Erk3; MK04_HUMAN; MAPK4; MAP kinase 4; MAPK 4; Extracellular signal-regulated kinase 4 (ERK-4); MAP kinase isoform p63 (p63-MAPK); 2.7.11.24; MK04_MOUSE; MK04_RAT; MNK2; mitogen-activated protein kinase 4 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-Cyt=2ug/Test |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **Name** | MAPK4 |
| **Synonyms** | ERK4, PRKM4 |
| **Function** | Atypical MAPK protein. Phosphorylates microtubule-associated protein 2 (MAP2) and MAPKAPK5. The precise role of the complex formed with MAPKAPK5 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPKAPK5, ERK4/MAPK4 is phosphorylated at Ser-186 and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK4/MAPK4. May promote entry in the cell cycle (By similarity). |
| **Cellular Location** | Cytoplasm. Nucleus. Note=Translocates to the cytoplasm following interaction with MAPKAPK5 |
| **Tissue Location** | High expression in heart and brain. |

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