10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAPK4 Rabbit pAb

Catalog # AP98544

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P31152
Other Accession	P31152
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65922
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ERK5
Epitope Specificity	401-500/587
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

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	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug /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

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'.