**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for TA500411AM

## MEK4 (MAP2K4) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI4B4]

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Clone Name:** | OTI4B4 |
| **Applications:** | FC, IF, IHC, IP, WB |
| **Recommended Dilution:** | WB 1:2000, IHC 1:150, IF 1:100, FLOW 1:100, IP 2ug/500ul |
| **Reactivity:** | Human, Mouse, Rat |
| **Host:** | Mouse |
| **Isotype:** | IgG2a |
| **Clonality:** | Monoclonal |
| **Immunogen:** | Full-length protein expressed in 293T cell transfected with human MAP2K4 expression vector |
| **Formulation:** | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide. |
| **Concentration:** | 0.5 mg/ml |
| **Purification:** | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| **Conjugation:** | Biotin |
| **Storage:** | Store at -20°C as received. |
| **Stability:** | Stable for 12 months from date of receipt. |
| **Predicted Protein Size:** | 44.3 kDa |
| **Gene Name:** | mitogen-activated protein kinase kinase 4 |
| **Database Link:** | NP_003001<br>Entrez Gene 26398 MouseEntrez Gene 287398 RatEntrez Gene 6416 Human<br>P45985 |
| **Background:** | This gene encodes a dual specificity protein kinase that belongs to the Ser/Thr protein kinase family. This kinase is a direct activator of MAP kinases in response to various environmental stresses or mitogenic stimuli. It has been shown to activate MAPK8/JNK1, MAPK9/JNK2, and MAPK14/p38, but not MAPK1/ERK2 or MAPK3/ERK3. This kinase is phosphorylated, and thus activated by MAP3K1/MEKK. The knockout studies in mice suggested the roles of this kinase in mediating survival signal in T cell development, as well as in the organogenesis of liver. |

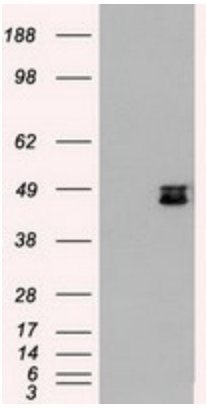
View online »

**Synonyms:** JNKK; JNKK1; MAPKK4; MEK4; MKK4; PRKMK4; SAPKK-1; SAPKK1; SEK1; SERK1; SKK1

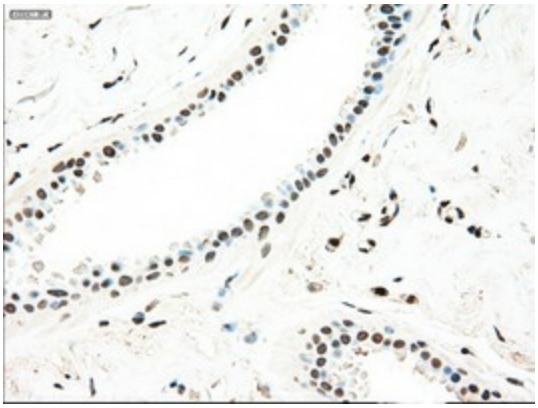
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, GnRH signaling pathway, MAPK signaling pathway, Toll-like receptor signaling pathway

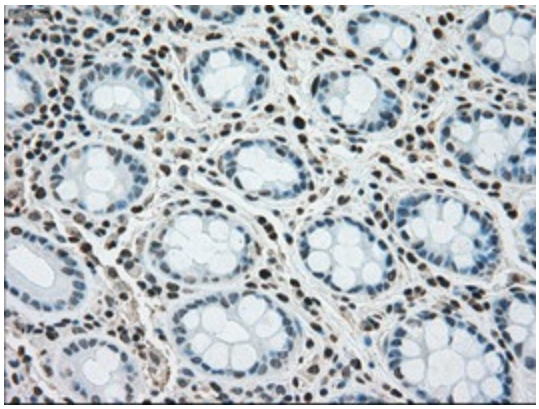
## Product images:



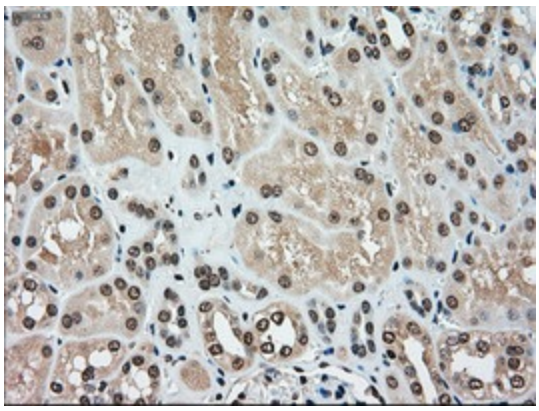

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY MAP2K4 ([RC206051], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAP2K4 ([TA500411]). Positive lysates [LY401058] (100ug) and [LC401058] (20ug) can be purchased separately from OriGene.



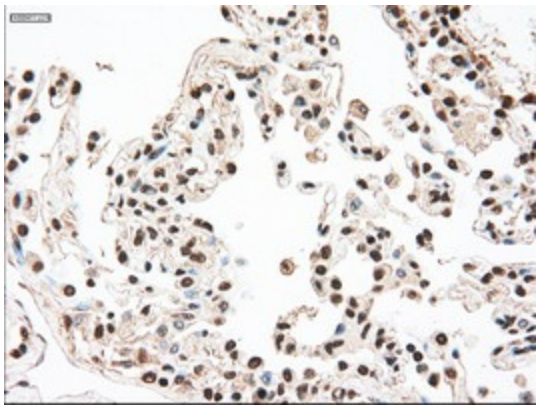
Immunohistochemical staining of paraffin-embedded Human breast tissue within the normal limits using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500411])



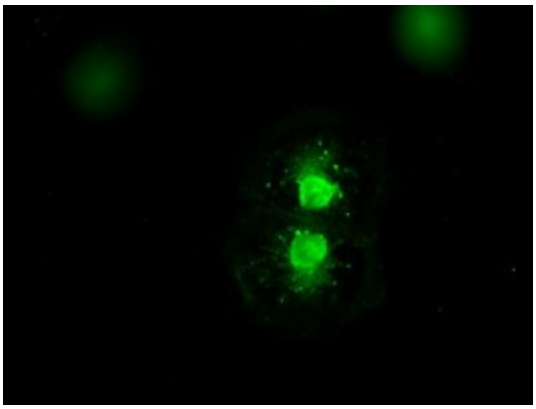
Immunohistochemical staining of paraffin-embedded Human colon tissue within the normal limits using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500411])



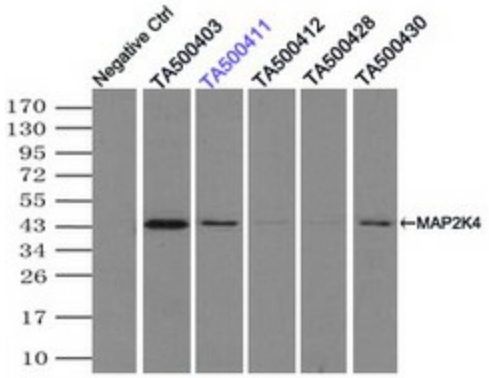
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500411])



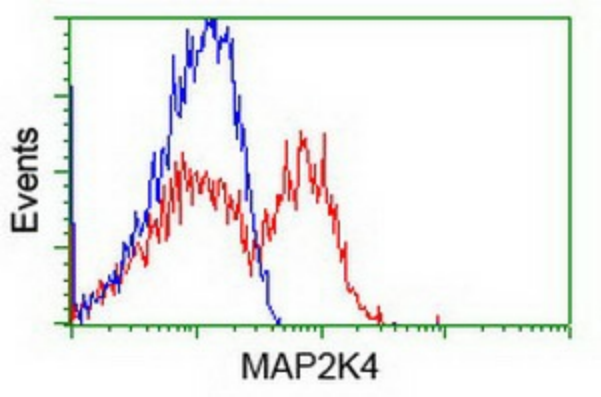
Immunohistochemical staining of paraffin-embedded Human lung tissue within the normal limits using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500411])



Anti-MAP2K4 mouse monoclonal antibody ([TA500411]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MAP2K4 ([RC206051]).




Immunoprecipitation (IP) of MAP2K4 by using TrueMab monoclonal anti-MAP2K4 antibodies (Negative control: IP without adding anti-MAP2K4 antibody.). For each experiment, 500ul of DDK tagged MAP2K4 overexpression lysates (at 1:5 dilution with HEK293T lysate), 2ug of anti-MAP2K4 antibody and 20ul (0.1mg) of goat anti-mouse conjugated magnetic beads were mixed and incubated overnight. After extensive wash to remove any non-specific binding, the immuno-precipitated products were analyzed with rabbit anti-DDK polyclonal antibody.




HEK293T cells transfected with either [RC206051] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-MAP2K4 antibody ([TA500411]), and then analyzed by flow cytometry.