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Product datasheet for CF500403

MEK4 (MAP2K4) Mouse Monoclonal Antibody [Clone ID: OTI8A8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI8A8
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	WB 1:500~1000, IHC 1:150, IF 1:50~100, FLOW 1:100, IP 2ug/500ul
Reactivity:	Human, Dog, Mouse, Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full-length protein expressed in 293T cell transfected with human MAP2K4 expression vector
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	44.3 kDa
Gene Name:	Homo sapiens mitogen-activated protein kinase kinase 4 (MAP2K4), transcript variant 1, mRNA.
Database Link:	NP_003001 Entrez Gene 26398 MouseEntrez Gene 287398 RatEntrez Gene 489508 DogEntrez Gene 6416 Human P45985

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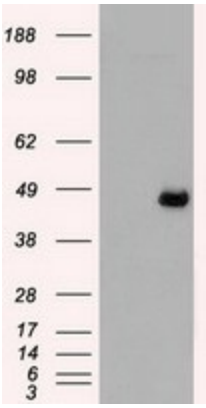
Background: This gene encodes a dual specificity protein kinase that belongs to the Ser/Thr protein kinase family. This kinase is a direct activator of MAP kinases in response to various environmental stresses or mitogenic stimuli. It has been shown to activate MAPK8/JNK1, MAPK9/JNK2, and MAPK14/p38, 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

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

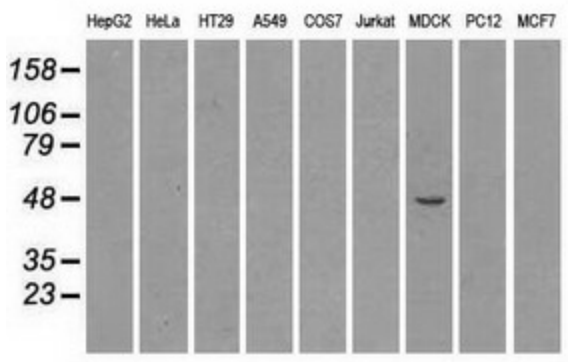
Protein Families: Druggable Genome, Protein Kinase

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

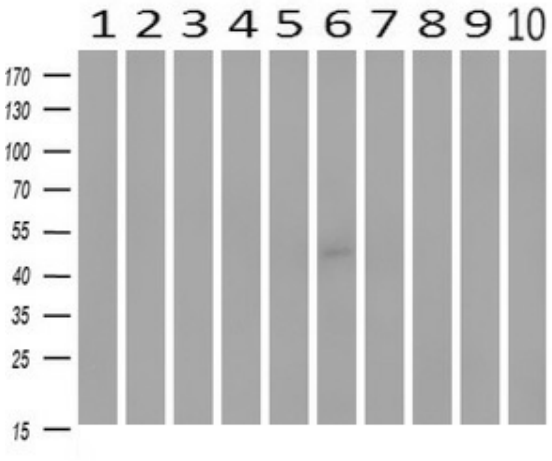
Product images:



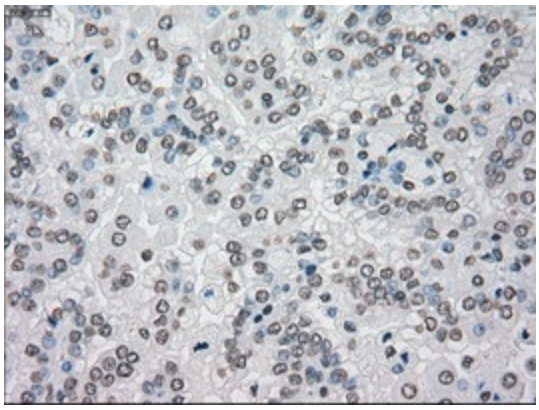
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MAP2K4 (Cat# [RC206051], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAP2K4(Cat# [TA500403]). Positive lysates [LY401058] (100ug) and [LC401058] (20ug) can be purchased separately from OriGene.



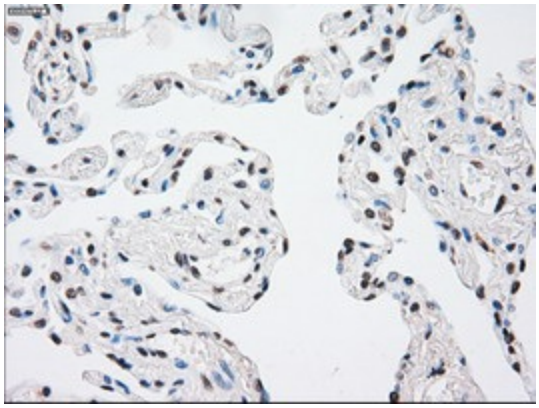
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-MAP2K4 monoclonal antibody.



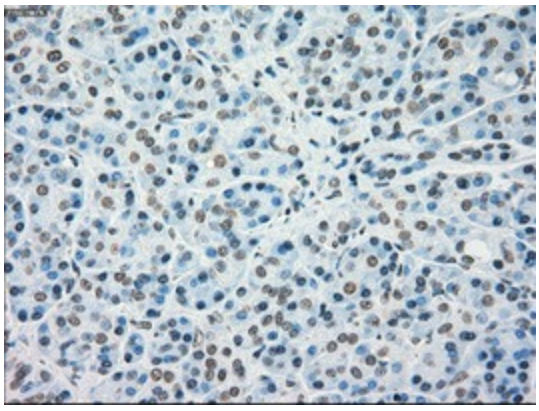
Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-MAP2K4 monoclonal antibody at 1:500 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon;10: spleen).



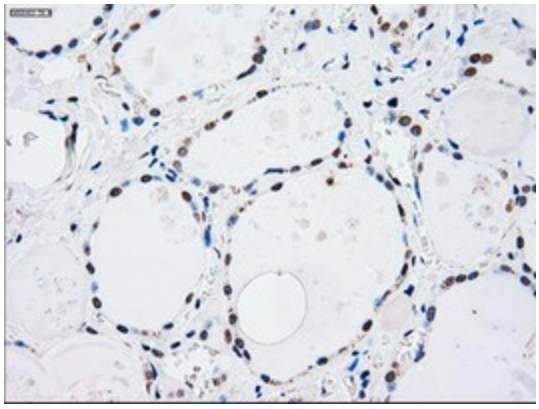
Immunohistochemical staining of paraffin-embedded Carcinoma of Human kidney tissue using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500403])



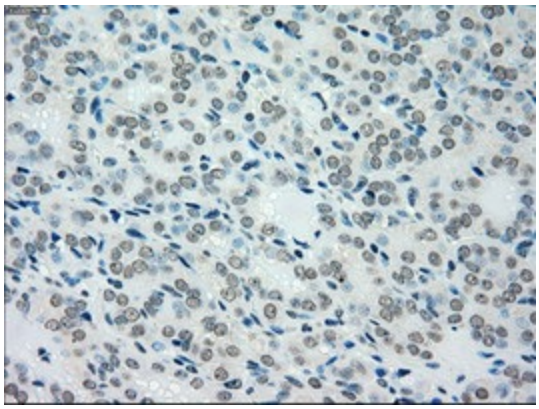
Immunohistochemical staining of paraffin-embedded Human lung tissue within the normal limits using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500403])



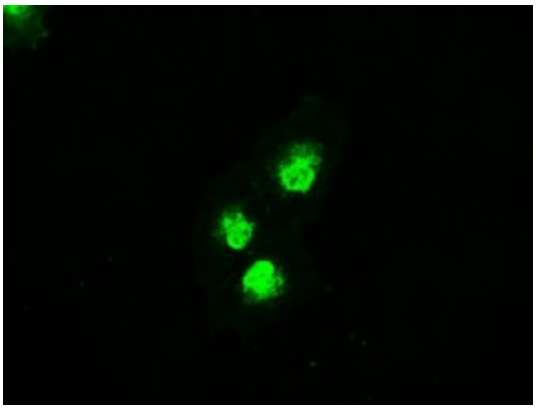
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500403])



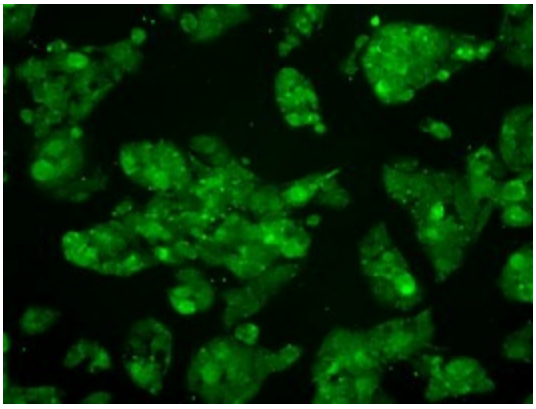
Immunohistochemical staining of paraffin-embedded Human thyroid tissue within the normal limits using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500403])



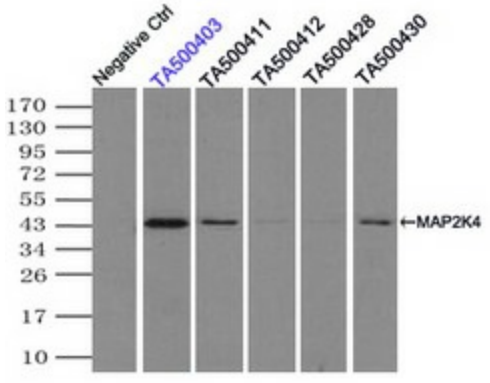
Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-MAP2K4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500403])



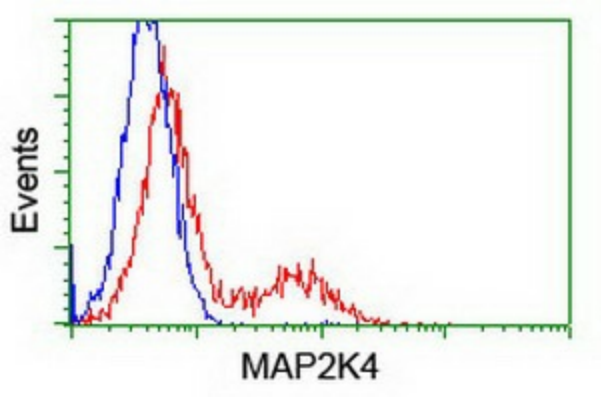
Anti-MAP2K4 mouse monoclonal antibody ([TA500403]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MAP2K4 ([RC206051]).



Immunofluorescent staining of HepG2 cells using anti-MAP2K4 mouse monoclonal antibody ([TA500403]).



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 ([TA500403]), and then analyzed by flow cytometry.