

OriGene Technologies, Inc.

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Product datasheet for TA500467

ERK2 (MAPK1) Mouse Monoclonal Antibody [Clone ID: OTI9E9]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI9E9

Applications: IHC, IP, WB

Recommend Dilution: WB 1:1000, IHC 1:50, IP 2ug/500ul

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human MAPK1(NP_620407) produced in HEK293T

cell

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1.2 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 41.4 kDa

Gene Name: mitogen-activated protein kinase 1

Database Link: NP 620407 Entrez Gene 5594 Human

Background: The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also

known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple

biochemical signals, and are involved in a wide variety of cellular processes such as

proliferation, differentiation, transcription regulation and development. The activation of this

kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. Two alternatively spliced transcript variants encoding the same protein, but differing in the

UTRs, have been reported for this gene.

Synonyms: ERK; ERK-2; ERK2; ERT1; MAPK2; p38; p40; p41; p41mapk; p42-MAPK; P42MAPK; PRKM1;

PRKM2

Protein Families: Druggable Genome, Protein Kinase

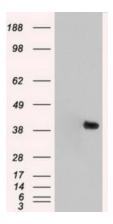




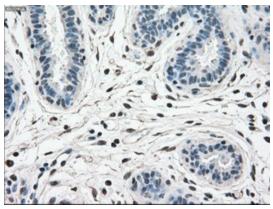
Protein Pathways:

Acute myeloid leukemia, Adherens junction, Alzheimer's disease, Axon guidance, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Longterm depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Non-small cell lung cancer, Oocyte meiosis, Pancreatic cancer, Pathways in cancer, Prion diseases, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, TGF-beta signaling pathway, Thyroid cancer, Toll-like receptor signaling pathway, Type II diabetes mellitus, Vascular smooth muscle contraction, VEGF signaling pathway

Product images:

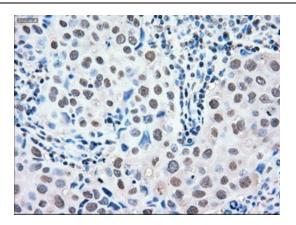


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY MAPK1 ([RC204703], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK1. Positive lysates [LY408481] (100ug) and [LC408481] (20ug) can be purchased separately from OriGene.

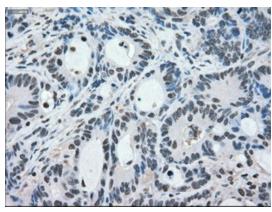


Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)

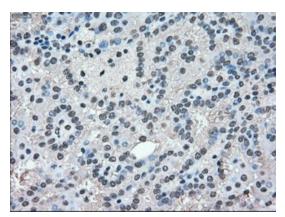




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)

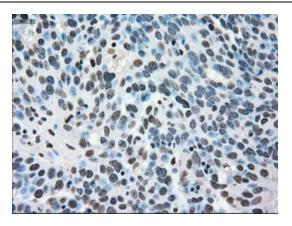


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)

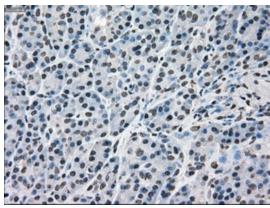


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)

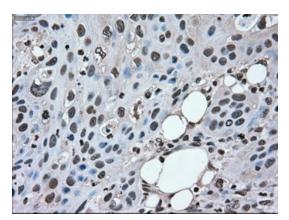




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)

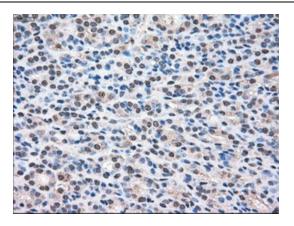


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)

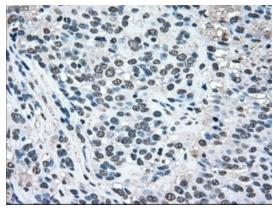


Immunohistochemical staining of paraffinembedded Carcinoma of Human pancreas tissue using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)

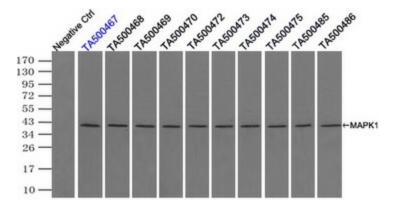




Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)



Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-MAPK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500467)



Immunoprecipitation (IP) of MAPK1 by using TrueMab monoclonal anti-MAPK1 antibodies (Negative control: IP without adding anti-MAPK1 antibody.). For each experiment, 500ul of DDK tagged MAPK1 overexpression lysates (at 1:5 dilution with HEK293T lysate), 2ug of anti-MAPK1 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 immunoprecipitated products were analyzed with rabbit anti-DDK polyclonal antibody.