

OriGene Technologies, Inc.

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Product datasheet for TA505700

ERK1 (MAPK3) Mouse Monoclonal Antibody [Clone ID: OTI4D7]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI4D7

Applications: IF, IHC, WB

Recommend Dilution: WB 1:200~2000, IHC 1:150, IF 1:100

Reactivity: Human, Monkey, Dog

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human MAPK3(NP_002737) produced in HEK293T

cell

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

Concentration: 1 mg/ml

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

(protein A/G)

Predicted Protein Size: 43 kDa

Gene Name: mitogen-activated protein kinase 3

Database Link: NP 002737 Entrez Gene 100855877 DogEntrez Gene 708938 MonkeyEntrez Gene 5595

<u>Human</u>

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 in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms

have been described. [provided by RefSeq]

Synonyms: ERK-1; ERK1; ERT2; HS44KDAP; HUMKER1A; p44-ERK1; p44-MAPK; P44ERK1; P44MAPK; PRKM3

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

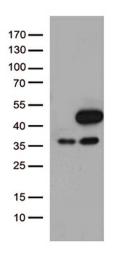




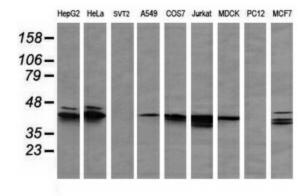
Protein Pathways:

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:

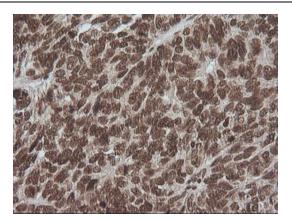


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY HLA-G ([RC204196], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK3. Positive lysates [LY400968] (100ug) and [LC400968] (20ug) can be purchased separately from OriGene.

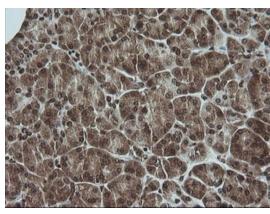


Western blot analysis of extracts (35ug) from 9 different cell lines by usin g anti-MAPK3 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

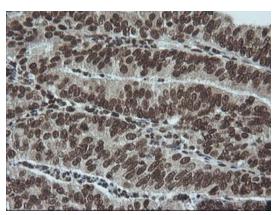




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-MAPK3 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA505700)

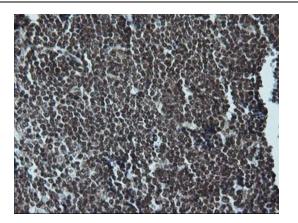


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-MAPK3 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA505700)



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-MAPK3 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA505700)

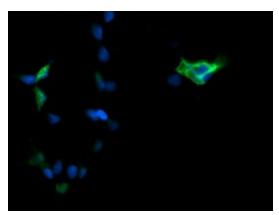




Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-MAPK3 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA505700)



Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-MAPK3 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA505700)



Anti-MAPK3 mouse monoclonal antibody (TA505700) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MAPK3 ([RC204196]).