

Product datasheet for **CF505700**

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

Product data:

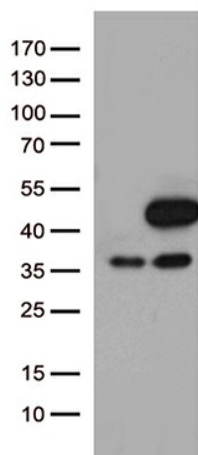
Product Type:	Primary Antibodies
Clone Name:	OTI4D7
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:200~2000, IHC 1:150, IF 1:100
Reactivity:	Human, Dog, Monkey, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human MAPK3(NP_002737) produced in HEK293T cell.
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:	43 kDa
Gene Name:	mitogen-activated protein kinase 3
Database Link:	NP_002737 Entrez Gene 26417 Mouse Entrez Gene 50689 Rat Entrez Gene 100855877 Dog Entrez Gene 708938 Monkey Entrez Gene 5595 Human P27361



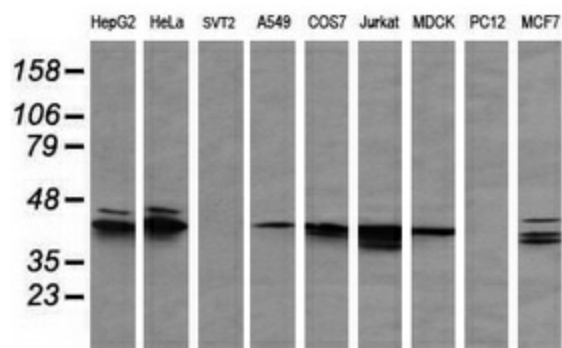
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Background:	The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, 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, Long-term 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

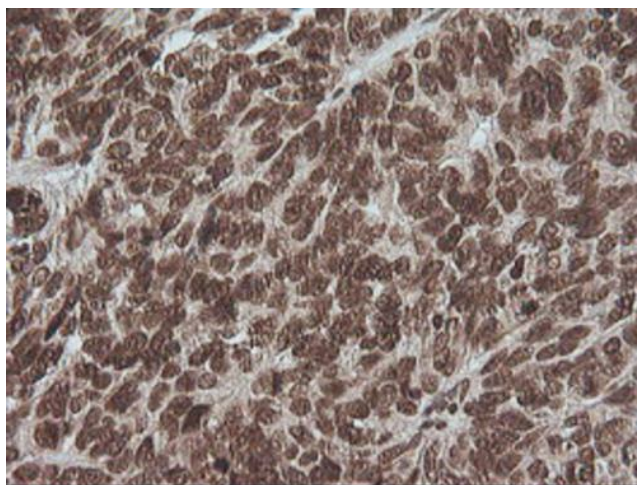
Product images:



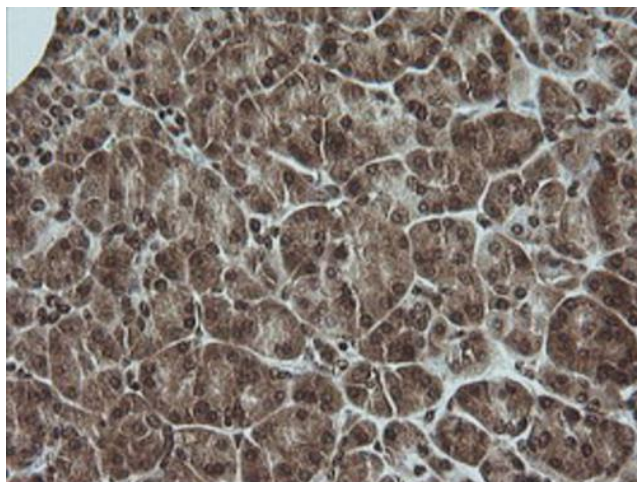
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HLA-G (Cat# [RC204196], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK3 (Cat# [TA505700]). Positive lysates [LY400968] (100ug) and [LC400968] (20ug) can be purchased separately from OriGene.



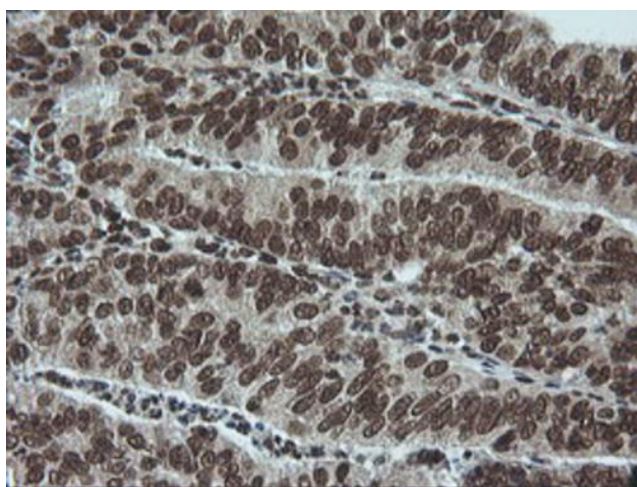
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-MAPK3 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



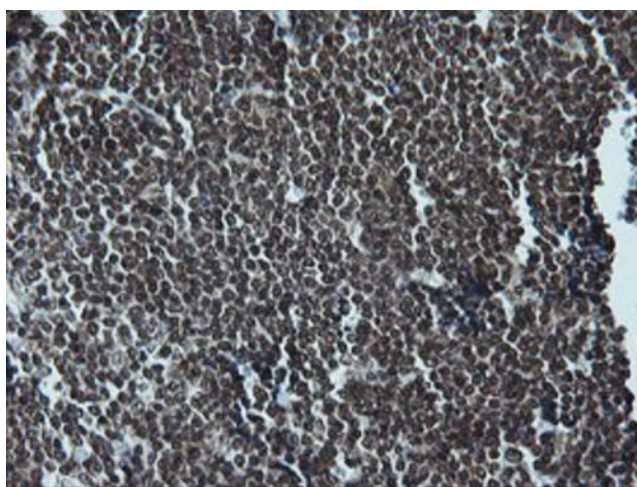
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-MAPK3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



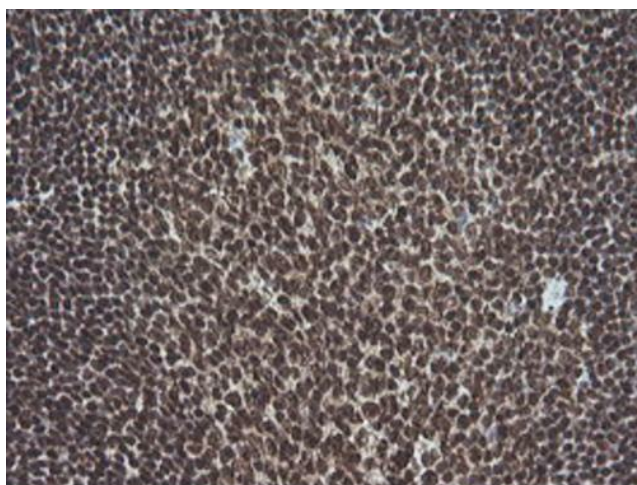
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-MAPK3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



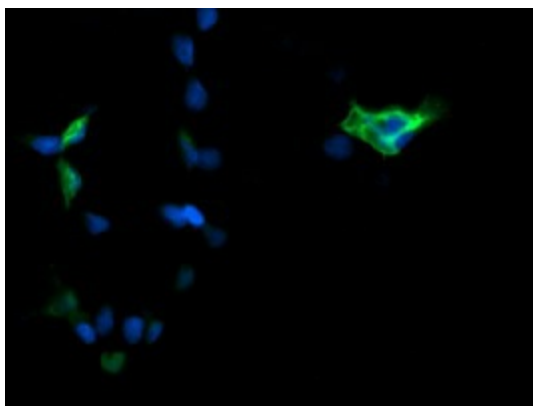
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-MAPK3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-MAPK3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-MAPK3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



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