

# **Product datasheet for CF505910**

# OriGene Technologies, Inc.

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### JNK2 (MAPK9) Mouse Monoclonal Antibody [Clone ID: OTI4D1]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI4D1

Applications: IF, IHC, WB

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

Reactivity: Human, Dog, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human MAPK9(NP\_620707) 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: 43.9 kDa

**Gene Name:** mitogen-activated protein kinase 9

Database Link: NP 620707

Entrez Gene 26420 MouseEntrez Gene 50658 RatEntrez Gene 474652 DogEntrez Gene 5601

<u>Human</u> <u>P45984</u>





Background:

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases 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. This kinase targets specific transcription factors, and thus mediates immediate-early gene expression in response to various cell stimuli. It is most closely related to MAPK8, both of which are involved in UV radiation induced apoptosis, thought to be related to the cytochrome c-mediated cell death pathway. This gene and MAPK8 are also known as c-Jun N-terminal kinases. This kinase blocks the ubiquitination of tumor suppressor p53, and thus it increases the stability of p53 in nonstressed cells. Studies of this gene's mouse counterpart suggest a key role in T-cell differentiation. Several alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Sep 2008]

Synonyms:

JNK-55; JNK2; JNK2A; JNK2ALPHA; JNK2B; JNK2BETA; p54a; p54aSAPK; PRKM9; SAPK; SAPK1a

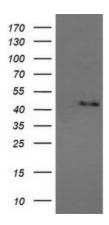
**Protein Families:** 

Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

**Protein Pathways:** 

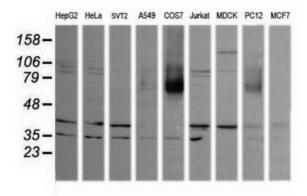
Adipocytokine signaling pathway, Colorectal cancer, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, Focal adhesion, GnRH signaling pathway, Insulin signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, RIG-I-like receptor signaling pathway, T cell receptor signaling pathway, Toll-like receptor signaling pathway, Type II diabetes mellitus, Wnt signaling pathway

### **Product images:**

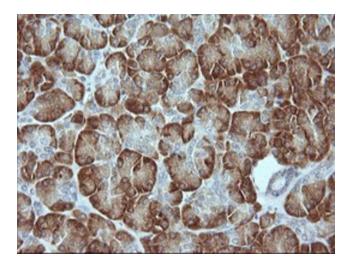


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY MAPK9 ([RC207608], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK9. Positive lysates [LY408411] (100ug) and [LC408411] (20ug) can be purchased separately from OriGene.

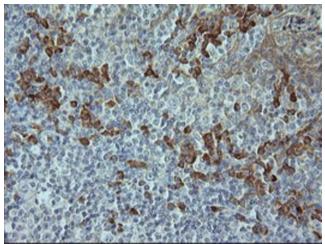




Western blot analysis of extracts (35ug) from 9 different cell lines by usin g anti-MAPK9 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

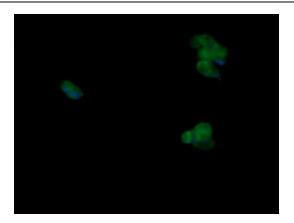


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-MAPK9 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-MAPK9 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





Anti-MAPK9 mouse monoclonal antibody ([TA505910]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MAPK9 ([RC207608]).