

MKP-4 Polyclonal Antibody

Catalog No: YT2775

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: MKP-4

Fields: >>MAPK signaling pathway;>>Signaling pathways regulating pluripotency of

stem cells

Gene Name: DUSP9

Protein Name: Dual specificity protein phosphatase 9

Q99956

Human Gene Id: 1852

Human Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

DUSP9. AA range:151-200

Specificity: MKP-4 Polyclonal Antibody detects endogenous levels of MKP-4 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

1/4

Observed Band: 42kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;

Background:

The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product shows selectivity for members of the ERK family of MAP kinases and is localized to the cytoplasm and nucleus. Aberrant expression of this gene is associated with type 2 diabetes and cancer progr

Function:

catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate.,catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,function:Inactivates MAP kinases. Has a specificity for the ERK family.,similarity:Belongs to the protein-tyrosine phosphatase family. Non-receptor class dual specificity subfamily.,similarity:Contains 1 rhodanese domain.,similarity:Contains 1 tyrosine-protein phosphatase domain.,

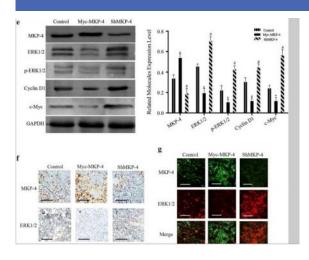
Subcellular Location:

Cytoplasm.

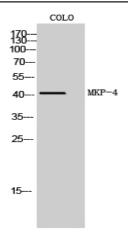
Expression:

Kidney, Liver, Lung, Placenta,

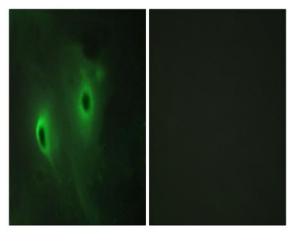
Products Images



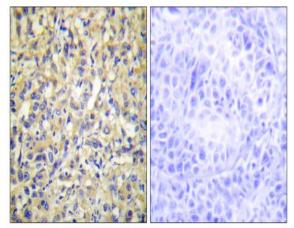
Shen, Zhongyi, et al. "MKP-4 suppresses hepatocarcinogenesis by targeting ERK1/2 pathway." Cancer Cell International 19.1 (2019): 61.



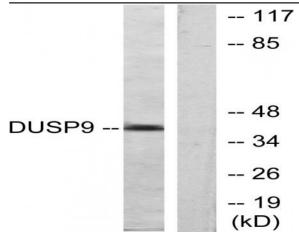
Western Blot analysis of COLO cells using MKP-4 Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of HeLa cells, using DUSP9 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human liver carcinoma tissue, using DUSP9 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using DUSP9 Antibody. The lane on the right is blocked with the synthesized peptide.