



MKP-4 Polyclonal Antibody

Catalog No	YP-Ab-14850
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	DUSP9
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	dual specificity phosphatase 9;EC:3.1.3.16;MAP kinase phosphatase 4;Mitogen-activated protein kinase phosphatase 4;MKP 4;MKP-4;DUSP9;Dual specificity protein phosphatase 9;MKP4
Observed Band	42kD
Calculated Molecular Weight	42kD
Cell Pathway	Cytoplasm.
Tissue Specificity	Kidney,Liver,Lung,Placenta,
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.,

**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

matters needing attention

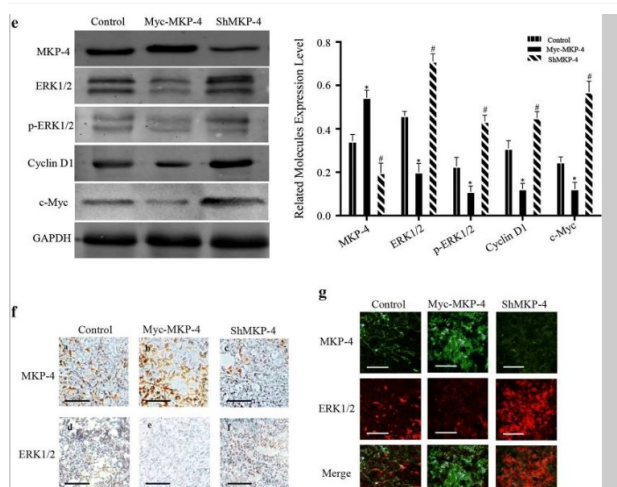
Avoid repeated freezing and thawing!

Usage suggestions

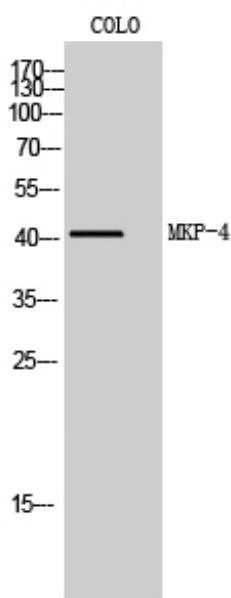
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



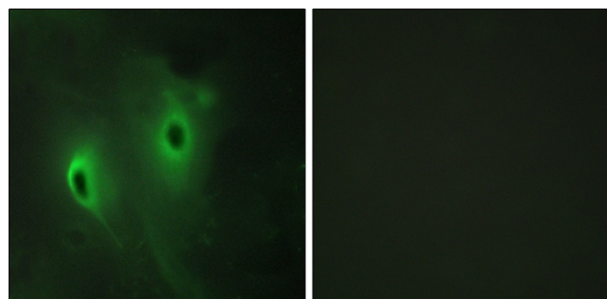
Products Images



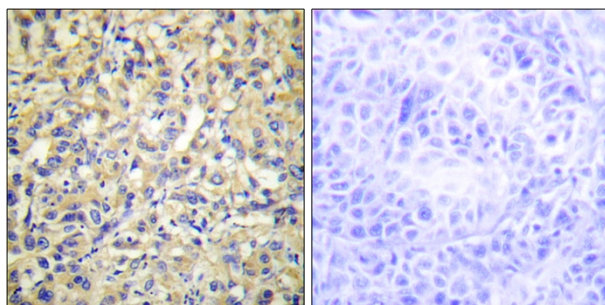
Shen, Zhongyi, et al. "MKP-4 suppresses hepatocarcinogenesis by targeting ERK1/2 pathway." *Cancer Cell International* 19.1 (2019): 61.



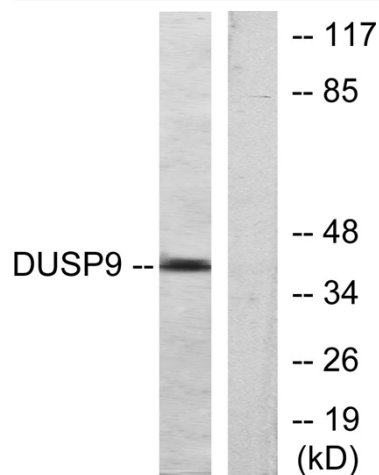
Western Blot analysis of COLO cells using MKP-4 Polyclonal Antibody diluted at 1:1000



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.