ERK 1/2 (Phospho-Tyr222/205) (4G3) Mouse mAb

CatalogNo: YP1882

Key Features

Host Species
- Mouse

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF

MW
- 44,42kD (Observed)

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

IHC 1:100-200
IF 1:50-200
WB 1:1000-1:5000

Basic Information

Clonality	Monoclonal
Clone Number	4G3

Immunogen Information

Immunogen	Synthetic Peptide of Phospho-ERK 1/2 (Y222/205) at AA range of 140-220
Specificity	This antibody detects endogenous levels of p44 and p42 MAP Kinase (Erk1 and Erk2) when dually phosphorylated at Thr222 of Erk1 (Thr205 of Erk2)

Target Information

Gene name MAPK1/MAPK3

Protein Name MAPK1/MAPK3

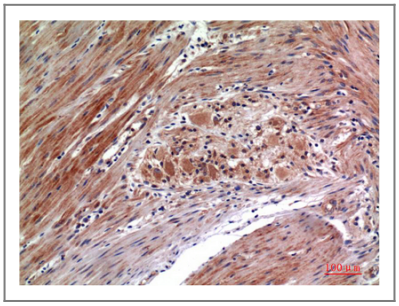
Organism	Gene ID	UniProt ID
Human	5594; 5595;	P27361; P28482;
Mouse	26417; 26413;	
Rat	50689; 116590;	P21708; P63086;

Cellular Localization Cytoplasm . Nucleus. Membrane , caveola . Cell junction , focal adhesion . Autophosphorylation at Thr-207 promotes nuclear localization (PubMed:19060905) . PEA15-binding redirects the biological outcome of MAPK3 kinase-signaling by sequestering MAPK3 into the cytoplasm (By similarity) . .

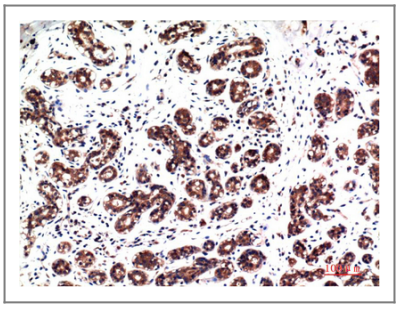
Tissue specificity Epithelium ,Eye ,Hepatoma ,Human cervix ,Lymph ,

Function Catalytic activity:ATP + a protein = ADP + a phosphoprotein. ,cofactor:Magnesium. ,Domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases. ,enzyme regulation:Activated by tyrosine phosphorylation in response to insulin and NGF. ,Function:Involved in both the initiation and regulation of meiosis , mitosis , and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK-1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2) . Phosphorylates SPZ1 (By similarity) . Phosphorylates heat shock factor protein 4 (HSF4) . ,PTM:Dually phosphorylated on Thr-202 and Tyr-204 , which activates the enzyme. ,similarity:Belongs to the protein kinase superfamily. ,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. ,similarity:Contains 1 protein kinase domain. ,subunit:Interacts with MORG1 (By similarity) . Binds to HIV-1 Nef. This interaction inhibits its kinase activity. Interacts with HSF4 and NISCH. ,

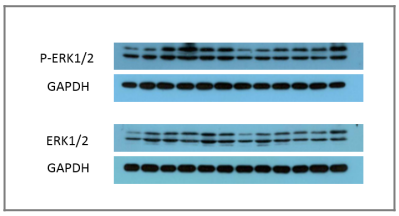
Validation Data



Immunohistochemical analysis of paraffin-embedded Human Colon Carcinoma Tissue using Phospho-ERK1/2 Y222/205 Mouse mAb diluted at 1:200



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma Tissue using Phospho-ERK1/2 Y222/205 Mouse mAb diluted at 1:200.



The picture was kindly provided by our customer. Primary antibody was diluted at 1:2000. Loading control antibody was diluted at 1:20000

Contact information

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Please scan the QR code to access additional product information:
ERK 1/2 (Phospho-Tyr222/205) (4G3) Mouse mAb