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Phospho-ERK1/2 (Thr202) pAb

货号: ABY1215

产品信息

反应	Human, Mouse, Rat
宿主	Rabbit
克隆性	Polyclonal
预测反应	
应用	WB IHC IF/ICC
推荐浓度	**WB:** 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:200
理论分子量	43kDa/41kDa
实测分子量	
形式	Liquid
保存条件	Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.75% BSA,50% glycerol,pH7.5.
偶联物	Unconjugated
阳性对照	NIH/3T3
细胞定位	Cytoplasm, cytoskeleton, spindle
纯化	亲和纯化

抗原信息

抗原信息	

靶点信息

研究背景	Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway (PubMed:34497368). MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade also plays a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. About 160 substrates have already been discovered for ERKs. Many of these substrates are localized in the nucleus, and seem to participate in the regulation of transcription upon stimulation. However, other substrates are found in the cytosol as well as in other cellular organelles, and those are responsible for processes such as translation, mitosis and apoptosis. Moreover, the MAPK/ERK cascade is also involved in the regulation of the endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC); as well as in the fragmentation of the Golgi apparatus during mitosis. The substrates include transcription factors (such as ATF2, BCL6, ELK1, ERF, FOS, HSF4 or SPZ1), cytoskeletal elements (such as CANX, CTTN, GJA1, MAP2, MAPT, PXN, SORBS3 or STMN1), regulators of apoptosis (such as BAD, BTG2, CASP9, DAPK1, IER3, MCL1 or PPARG), regulators of translation (such as EIF4EBP1) and a variety of other signaling-related molecules (like ARHGEF2, DEPTOR, FRS2 or GRB10) (PubMed:35216969). Protein kinases (such as RAF1, RPS6KA1/RSK1, RPS6KA3/RSK2, RPS6KA2/RSK3, RPS6KA6/RSK4, SYK, MKNK1/MNK1, MKNK2/MNK2, RPS6KA5/MSK1, RPS6KA4/MSK2, MAPKAPK3 or MAPKAPK5) and phosphatases (such as DUSP1, DUSP4, DUSP6 or DUSP16) are other substrates which enable the propagation the MAPK/ERK signal to additional cytosolic and nuclear targets, thereby extending the specificity of the cascade. Phosphorylates GJA1 at 'Ser-279' and 'Ser-282' resulting in an increase in GJA1 ubiquitination and ultimately lysosomal degradation (By similarity). . Acts as a transcriptional repressor. Binds to a [GC]AAA[GC] consensus sequence. Repress the expression of interferon gamma-induced genes. Seems to bind to the promoter of CCL5, DMP1, IFIH1, IFITM1, IRF7, IRF9, LAMP3, OAS1, OAS2, OAS3 and STAT1. Transcriptional activity is independent of kinase activity. .
基因ID	5595, 5594
基因名	MAPK3, MAPK1
Swiss	P27361|P28482
别名	ERK 1; ERK; ERK-1; ERK1; ERT 2; ERT2; Extracellular Signal Regulated Kinase 1; Extracellular signal related kinase 1; Extracellular signal-regulated kinase 1; HGNC6877; HS44KDAP; HUMKER1A; Insulin Stimulated MAP2 Kinase; Insulin-stimulated MAP2 kinase; MAP kinase 1; MAP kinase 3; MAP Kinase; MAP kinase isoform p44; MAPK 1; MAPK 3; MAPK; MAPK1; Mapk3; MGC20180; Microtubule Associated Protein 2 Kinase; Microtubule-associated protein 2 kinase; Mitogen Activated Protein Kinase 3; Mitogen-activated protein kinase 1; Mitogen-activated protein kinase 3; MK03_HUMAN; OTTHUMP00000174538; OTTHUMP00000174541; p44 ERK1; p44 MAPK; p44-ERK1; p44-MAPK; P44ERK1; P44MAPK; PRKM 3; PRKM3; Protein Kinase Mitogen Activated 3; ERK 2; ERK; ERK-2; ERT1; Extracellular Signal Regulated Kinase 2; Extracellular signal-regulated kinase 2; MAP kinase 1; MAP kinase 2; MAP kinase isoform p42; MAPK 1; MAPK 2; Mapk1; MAPK2; Mitogen-activated protein kinase 1; Mitogen-activated protein kinase 2; MK01_HUMAN; P38; P40; P41; p42-MAPK; P42MAPK; PRKM1; PRKM2; protein kinase, mitogen-activated, 1; protein kinase, mitogen-activated, 2; protein tyrosine kinase ERK2;

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实验步骤

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