

## ERK2 Ab

Cat.#: BF0298  
Size: 50ul,100ul,200ul

Concn.: 1mg/ml  
Source: Mouse

Mol.Wt.: 41kDa  
Clonality: Monoclonal

Application:	ELISA 1/10000, WB 1/500 - 1/2000, IHC 1/200 - 1/1000, ICC 1/200 - 1/1000
Reactivity:	Human,Mouse,Monkey
Purification:	Affinity-chromatography.
Specificity:	ERK2 Ab detects endogenous levels of total ERK2.
Immunogen:	Purified recombinant fragment of human ERK2 expressed in E. Coli.
Uniprot:	P28482
Description:	ERK2 (also designated extracellular-signal-related kinase 2 or mitogen-activated protein kinase 1), with 360-amino acid protein (about 40kDa), belongs to 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. The activation of ERK2 requires its phosphorylation by upstream kinases. ERK2 is located in the cytoplasm of resting cells and translocates into the nucleus upon extracellular stimuli by active transport of a dimer. ERK2 is essential for placental development and ERK2 in the trophoblast compartment may be indispensable for the vascularization of the labyrinth.
Subcellular Location:	Nucleus.
Similarity:	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.
Storage Condition and Buffer:	Mouse IgG1 in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.

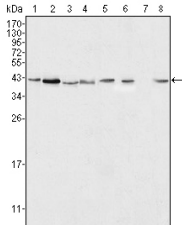
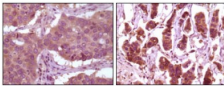
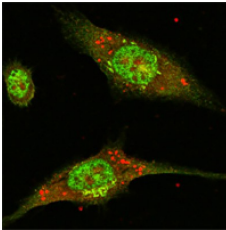


Figure 1: Western blot analysis using ERK2 mouse mAb against Hela (1), NIH/3T3 (2), MCF-7 (3), HEK293 (4), Jurkat (5), A549 (6), NTERA-2 (7) and SMMC-7721 (8) cell lysate.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma (left) and breast carcinoma (right) showing cytoplasmic localization using ERK2 mouse mAb with DAB staining.



Confocal immunofluorescence analysis of Eca-109 cells using ERK2 mouse mAb (green).

**IMPORTANT:** For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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