

Monoclonal Antibody to ERK2

Cat. #: Mab-606073

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.

Immunogen/Specificity:

Ni-NTA purified full length recombinant ERK2 expressed in E. Coli strain BL21 (DE3)

Applications :

Western Blot: 1: 500- 1: 2,000

IHC(P): 1: 500- 1: 2,000

IHC(F): 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Antibodies are purified by protein A affinity chromatography.

Reference:

1. Angelique W. Whitehurst, Fred L. Robinson, Mary Shannon Moore
J. Biol. Chem., Mar 2004; 279: 12840 - 12847
2. N Hatano, Y Mori, M Oh-hora
Genes Cells, Nov 2003; 8: 847 - 856.

Clone Number: 4C11C11C4

Isotype:IgG2a

Species: Human

Storage and Stability: stored at -20 C

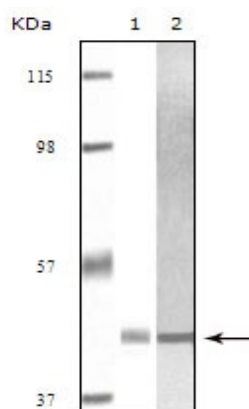
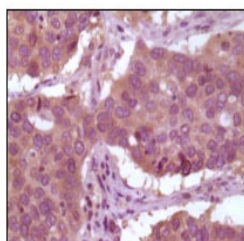
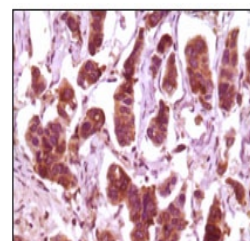


Figure 1: Western blot analysis using anti-Human ERK2 monoclonal antibody against truncated ERK2 recombinant protein(1) and Hela cell lysate(2).



Human lung carcinoma



Human breast carcinoma

Figure 2: Immunohistochemical analysis of paraffin-embedded Human lung carcinoma and breast carcinoma tissue, showing cytoplasmic localization using ERK2 antibody with DAB staining.