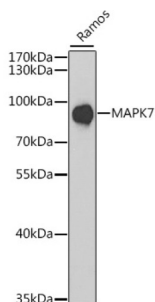
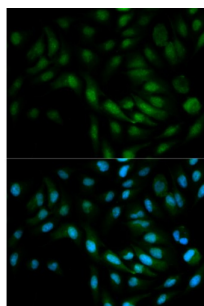


Mitogen-Activated Protein Kinase 7 / ERK5 (MAPK7) Antibody

Catalogue No.: abx001723



Western blot analysis of extracts of Ramos cells using MAPK7 Antibody (1/1000 dilution).



Immunofluorescence analysis of MCF-7 cells using MAPK7 Antibody

MAPK7 Antibody is a Rabbit Polyclonal antibody against MAPK7. ERK5 (Mitogen-activated protein kinase 7, Big mitogen-activated protein kinase 1) is a member of the MAPK superfamily implicated in the regulation numerous cellular processes including proliferation, differentiation, and survival (1,5-7). Like other MAPK family members, ERK5 contains a canonical activation loop TEY motif (Thr218/Tyr220) which is specifically phosphorylated by MAP2K5 (MEK5) in a growth factor-dependent, Ras-independent mechanism (2-4). For example, EGF stimulation promotes ERK5 phosphorylation which induces its translocation to the nucleus where it phosphorylates MEF2C and other transcriptional targets (2,3). ERK5 is also activated in response to granulocyte colony-stimulating factor (G-CSF) in hematopoietic progenitor cells where it promotes survival and proliferation (4). In neuronal cells, ERK5 is required for NGF-induced neurite outgrowth, neuronal homeostasis, and survival (11,12). ERK5 is thought to play a role in blood vessel integrity via maintenance of endothelial cell migration and barrier function (8-10). Although broadly expressed, research studies have shown that mice lacking erk5 display numerous cardiac defects, suggesting ERK5 plays a critical role in vascular development and homeostasis (1,5).

Target: Mitogen-Activated Protein Kinase 7 / ERK5 (MAPK7)

Clonality: Polyclonal

Reactivity: Human, Mouse, Rat

Tested Applications: WB, IF/ICC

Host: Rabbit

Recommended dilutions: WB: 1/500 - 1/2000, IF/ICC: 1/50 - 1/200. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Datasheet

Version: 4.0.0
Revision date: 14 Apr 2025



Immunogen:	Recombinant fusion protein corresponding to human MAPK7
Isotype:	IgG
Form:	Liquid
Purification:	Purified by affinity chromatography.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	Q13164 (UniProt , ExPASy)
Gene Symbol:	MAPK7
GeneID:	5598
NCBI Accession:	NP_002740.2
KEGG:	hsa:5598
String:	9606.ENSP00000311005
Molecular Weight:	Calculated MW: 50 kDa/59 kDa/73 kDa/88 kDa Observed MW: 50 kDa/80 kDa
Buffer:	PBS, pH 7.3, containing 0.02% sodium azide, 50% glycerol.
Concentration:	1 mg/ml
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.