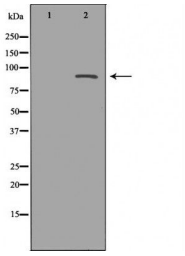
MAPK7 Antibody

#24106

Catalog Number: 24106-1, 24106-2
Amount: 50μg/50μl, 100μg/100μl
Swiss-Prot No. :Q13164
Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl,0.02% sodium azide and 50% glycerol.
Storage/Stability: Store at -20℃/1 year
Immunogen: The antiserum was produced against synthesized peptide derived from Human MAPK7
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Specificity/Sensitivity: MAPK7 antibody detects endogenous levels of total MAPK7 protein
Reactivity: Human,Mouse,Rat
Applications:
Predicted MW: 89kd WB:1:500~1:2000 IHC:1:100-500



Western blot analysis of extracts ofvarious celllines, using MAPK7 antibody.

Background :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 traslocation 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 hematopoetic progenitor cells where it promotes survival and proliferation (4). In neuronal cells, ERK5 is required for NGF-induced neurite outgrowth, neuronal homeostatis, and survival (11,12). ERK5 is thought to play a role in blood vessel integrity via maintainence 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).