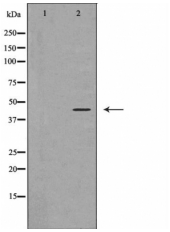
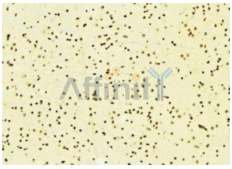
MAPK3 Ab

Cat.#: DF6031	Concn.: 1mg/ml	Mol.Wt.: 43kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

Application:	WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500
Reactivity:	Human,Mouse,Rat
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).
Specificity:	MAPK3 Ab detects endogenous levels of total MAPK3.
Immunogen:	N term -peptideof human MAPK3.
Uniprot:	P27361
Description:	Erk3, also known as MAPK6 or p97 MAPK, is almost 50% identical to Erk1/2 at the kinase domain located in its amino-terminal region (1). However, Erk3 is distinguished from other MAP kinases in that it lacks the conserved TXY motif in its activation loop, possessing instead an SEG motif (1,2). Phosphorylation at Ser189 in the SEG motif has been reported (2,3). With limited information about its upstream kinases and downstream substrates, the significance of this phosphorylation remains to be elucidated (3,4). Erk3 is an inherently unstable protein, rapidly degraded through amino-terminal ubiquitination and proteasome degradation (3,5). A site-specific cleavage, depending on a short stretch of acidic residues of Erk3, might regulate its translocation from the Golgi/ERGIC to the nucleus during the cell cycle (6). Accumulating evidence suggests that Erk3 is involved in cell differentiation (1,3,6).
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:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



Western blot analysis of NIH-3T3 cell lysates, using MAPK3 Ab. The lane on the left was treated with the antigen-specific peptide.



DF6031 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

DF6031 staining Hela by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

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.