[KO Validated] Anti-ERK2 Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P100804

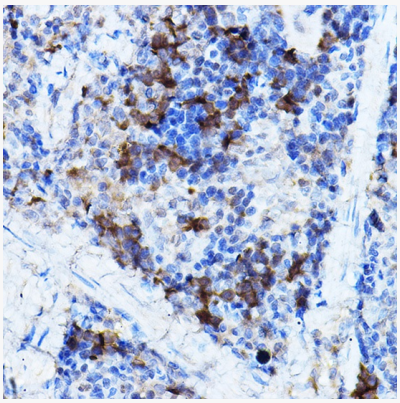
Product Information

Application	WB, IHC-P, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:1000; IHC-P 1:50~1:200; IF 1:50~1:200
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 200-300 of human ERK2 (NP_002736.3).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-ERK2 Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

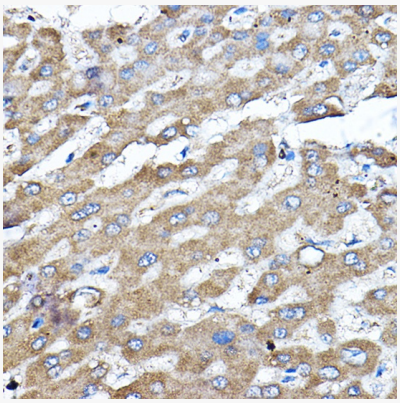
Protein Information

Synonyms	ERK; p38; p40; p41; ERK2; ERT1; NS13; ERK-2; MAPK2; PRKM1; PRKM2; P42MAPK; p41mapk; p42-MAPK; ERK2.
Calculated MW	Calculated MW: 41 kDa; Observed MW: 42 kDa/
Uniprot ID	P28482
Gene ID	5594
Background	This gene encodes a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), 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 this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. One study also suggests that this protein acts as a transcriptional repressor independent of its kinase activity. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene.

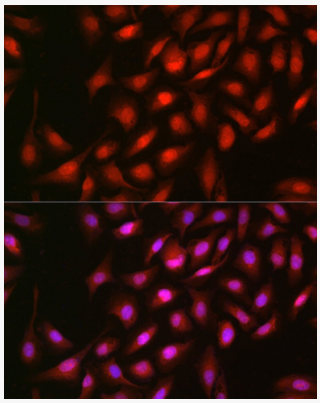
Validation Images



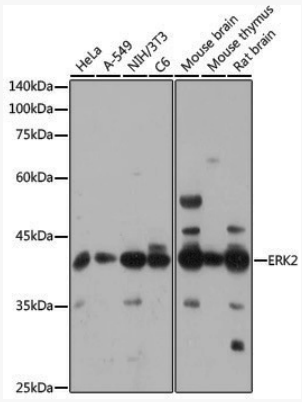
Immunohistochemistry analysis of paraffin-embedded Rat spleen using [KO Validated] ERK2 Rabbit pAb (P100804) at dilution of 1:100 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



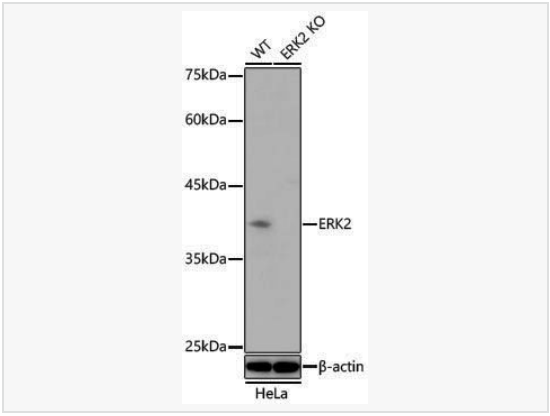
Immunohistochemistry analysis of paraffin-embedded Human liver using [KO Validated] ERK2 Rabbit pAb (P100804) at dilution of 1:100 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



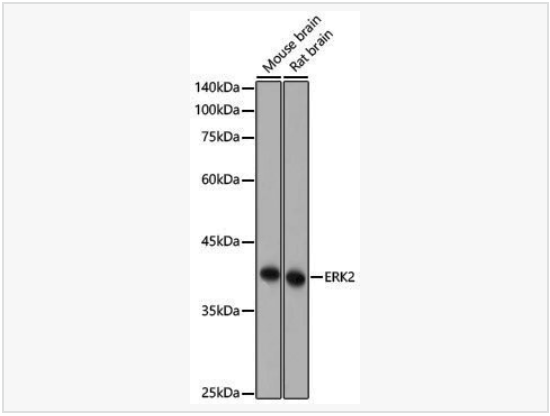
Immunofluorescence analysis of U-2 OS cells using [KO Validated] ERK2 Rabbit pAb (P100804) at dilution of 1:100 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



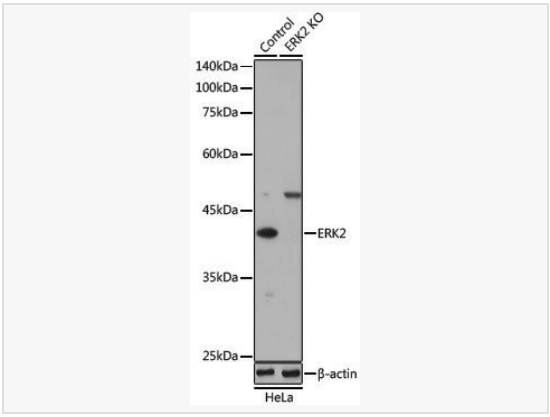
Western blot analysis of various lysates using [KO Validated] ERK2 Rabbit pAb (P100804) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Enhanced Kit.
Exposure time: 180s.



Western blot analysis of lysates from wild type (WT) and ERK2 knockout (KO) HeLa cells using [KO Validated] ERK2 Rabbit pAb (P100804) at 1:1,000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit
Exposure time: 90 s.



Western blot analysis of various lysates using [KO Validated] ERK2 Rabbit pAb (P100804) at 1:1,000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit
Exposure time: 30 s.



Western blot analysis of lysates from wild type (WT) and ERK2 knockout (KO) HeLa cells, using [KO Validated] ERK2 Rabbit pAb (P100804) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Enhanced Kit.
Exposure time: 180s.