

A19561

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## [KD Validated] ERK1 Rabbit mAb

Catalog No.: A19561

Recombinant

4 Publications

### Basic Information

#### Observed MW

44kDa

#### Calculated MW

43kDa

#### Category

SMab Recombinant Monoclonal Antibody

#### Applications

WB, IHC-P, IF/ICC, IP, ELISA

#### Cross-Reactivity

Human, Mouse, Rat

#### CloneNo number

ARC2591

### Background

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described.

### Recommended Dilutions

|        |  |
|--------|--|
| WB     | 1:500 - 1:1000   |
| IHC-P  | 1:50 - 1:200   |
| IF/ICC | 1:50 - 1:200   |
| IP     | 0.5µg-4µg antibody for<br>200µg-400µg extracts of<br>whole cells |

### Immunogen Information

#### Gene ID

5595

#### Swiss Prot

P27361

#### Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1-100 of human ERK1 (P27361).

#### Synonyms

ERK1; ERT2; ERK-1; PRKM3; P44ERK1; P44MAPK; HS44KDAP; HUMKER1A; p44-ERK1; p44-MAPK; K1

### Contact



[www.abclonal.com](http://www.abclonal.com)

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

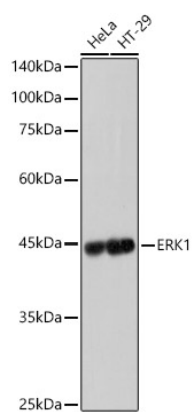
Affinity purification

#### Storage

Store at -20°C. Avoid freeze / thaw cycles.

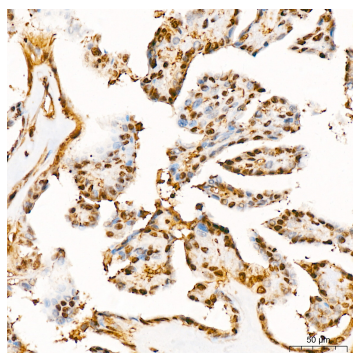
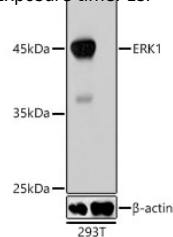
Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

## Validation Data

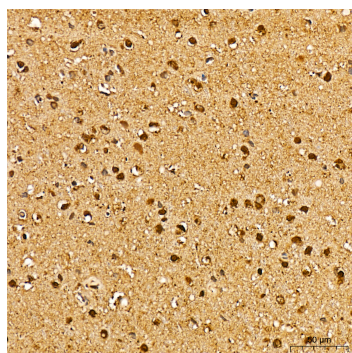


Western blot analysis of various lysates, using [KD Validated] ERK1 Rabbit mAb (A19561) at 1:1000 dilution.  
 Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 1s.

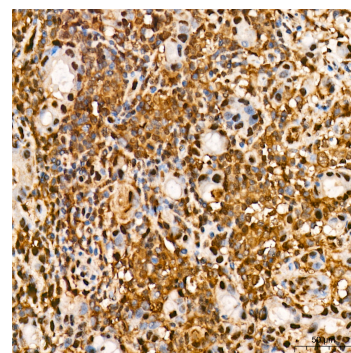
Western blot analysis of lysates from wild type(WT) and ERK1 knockdown (KD) 293T cells, using [KD Validated] ERK1 Rabbit mAb (A19561) at 1:1000 dilution.  
 Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 1s.



Immunohistochemistry analysis of ERK1 in paraffin-embedded human thyroid cancer tissue using [KD Validated] ERK1 Rabbit mAb (A19561) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

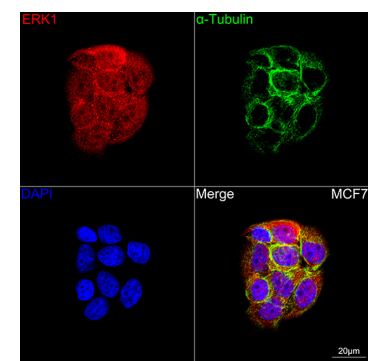


Immunohistochemistry analysis of ERK1 in paraffin-embedded human brain tissue using [KD Validated] ERK1 Rabbit mAb (A19561) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

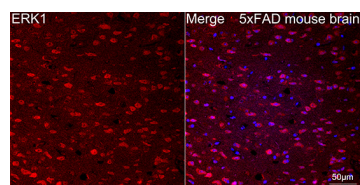


Immunohistochemistry analysis of ERK1 in paraffin-embedded human breast tissue using [KD Validated] ERK1 Rabbit mAb (A19561) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

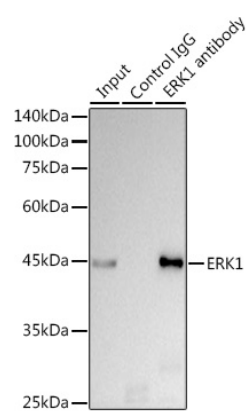
Validation Data



Confocal imaging of MCF7 cells using [KD Validated] ERK1 Rabbit mAb (A19561, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of paraffin-embedded 5xFAD mouse brain tissue using [KD Validated] ERK1 Rabbit mAb (A19561, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform microwave antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.



Immunoprecipitation analysis of 300 µg extracts of HeLa cells using 3 µg [KD Validated] ERK1 Rabbit mAb (A19561). Western blot was performed from the immunoprecipitate using ERK1 antibody (A19561) at a dilution of 1:1000.