

Rabbit Anti-phospho-BAD (Ser128)antibody

SL0893R

Product Name phospho-BAD (Ser128)

Chinese Name 磷酸化相关死亡促进因子抗体

Alias Bad (phospho S128); Bad (phospho Ser128); p-Bad (S128);p- Bad (Ser128); p-Bad (phospho Ser128); BBC 2; BBC2; BBC6; Bcl 2 Antagonist of Cell Death; Bcl 2 Binding Component 6; BCL X / BCL 2 Binding Protein; BCL X Binding Protein; Bcl XL/Bcl 2 Associated Death Promoter; Bcl-2-like protein 8; Bcl2 antagonist of cell death; BCL2 antagonist of cell death protein; BCL2 associated agonist of cell death; Bcl2 Associated Death Promoter; BCL2 binding component 6; BCL2 binding protein; Bcl2 Like 8 Protein; Bcl2-L-8; BCL2L8; BclXL; Proapoptotic BH3 Only Protein; BAD_HUMAN; Bcl-2-binding component 6.

Product Type Phosphorylated anti

Research Area Tumour Neurobiology Signal transduction Apoptosis The new supersedes the old

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat,

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test
(Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 22kDa

Cellular localization cytoplasmic The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated Synthesised phosphopeptide derived from mouse BAD around the phosphorylation site of Ser128: EL(p-S)PF

Lsotype IgG

Purification affinity purified by Protein A

**Buffer Solution**

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Bad is a member of the Bcl2 family and acts to promote apoptosis by forming heterodimers with the survival proteins Bcl2 and BclxL, thus preventing them from binding with BAX. Bad is found on the outer mitochondrial membrane and, once phosphorylated in response to growth stimuli, translocates to the cytoplasm. The phosphorylation status of Bad represents a key checkpoint for death or cell survival. JNK-induced phosphorylation of BAD serine 128 promotes the apoptotic role of Bad by opposing the inhibitory effect of growth factor on Bad-mediated apoptosis. Cdc2-induced phosphorylation of Bad serine 128 has an inhibitory effect on its interaction with 14-3-3 proteins. The latter interaction is critical for Bad phosphorylation at serine 155, a site within the BH3 domain that leads to the release of BclxL and the promotion of cell survival. Alternative splicing of this gene results in two transcript variants which encode the same isoform.

Function:

Promotes cell death. Successfully competes for the binding to Bcl-X(L), Bcl-2 and Bcl-W, thereby affecting the level of heterodimerization of these proteins with BAX. Can reverse the death repressor activity of Bcl-X(L), but not that of Bcl-2. Appears to act as a link between growth factor receptor signaling and the apoptotic pathways.

Product Detail**Subunit:**

Forms heterodimers with the anti-apoptotic proteins, Bcl-X(L), Bcl-2 and Bcl-W. Also binds protein S100A10. The Ser-75/Ser-99 phosphorylated form binds 14-3-3 proteins. Interacts with AKT1 and PIM3.

Subcellular Location:

Mitochondrion outer membrane. Cytoplasm. Note=Upon phosphorylation, locates to the cytoplasm.

Tissue Specificity:

Expressed in a wide variety of tissues.

Post-translational modifications:

Phosphorylated on one or more of Ser-75, Ser-99, Ser-118 and Ser-134 in response to survival stimuli, which blocks its pro-apoptotic activity. Phosphorylation on Ser-99 or Ser-75 promotes heterodimerization with 14-3-3 proteins. This interaction then facilitates the phosphorylation at Ser-118, a site within the BH3 motif, leading to the release of Bcl-X(L) and the promotion of cell survival. Ser-99 is the major site of AKT/PKB phosphorylation, Ser-118 the major site of protein kinase A (CAPK) phosphorylation.

Phosphorylation at Ser-99 by PKB/AKT1 is almost completely blocked by the apoptotic C-terminus cleavage product of PKN2 generated by caspases-3 activity during apoptosis. Methylation at Arg-94 and Arg-96 by PRMT1 inhibits Akt-mediated phosphorylation at Ser-99.

Similarity:

Belongs to the Bcl-2 family.

SWISS:

Q92934

Gene ID:

572

Database links:

[Entrez Gene: 572](#) Human

[Entrez Gene: 12015](#) Mouse

[Entrez Gene: 64639](#) Rat

[Omim: 603167](#) Human

[SwissProt: Q92934](#) Human

[SwissProt: Q61337](#) Mouse

[SwissProt: O35147](#) Rat

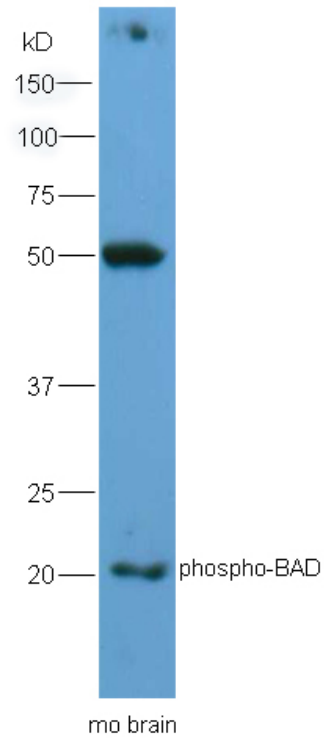
[Unigene: 370254](#) Human

[Unigene: 4387](#) Mouse

[Unigene: 36696](#) Rat

BAD 是 BCL2/BAX、BCL-XL/BAX 异二聚体的负调节基因。BAD 是 BCL2/BCL-XL 相关死亡促进因子，作为 BCL2、bCL-XL 异二聚体伴分子而促进 Apoptosis。有学者认为：BAD 缺乏典型的羧基端跨膜结构，提示其并非一完整膜蛋白。与同 BCL2 作用相比，BAD 与 BCL-XL 的结合更强，BAD 以浓度依赖性方式替换 BCL-XL/BAX、BCL2/BAX 异二聚体中的 BAX，使 BAX 游离而促进 Apoptosis。当一细胞系的所有细胞内异二聚体（BCL-XL/BAX 和 BCL2/BAX）的含量 $\geq 50\%$ 时，细胞耐受凋亡；而当细胞内 BAX 同二聚体 $> 80\%$ 时且在适当信号诱导下则细胞出现凋亡。这表明 BAD 通过调节 BAX 同二聚体与异二聚体量的比值而介导凋亡。

**Product
Picture**



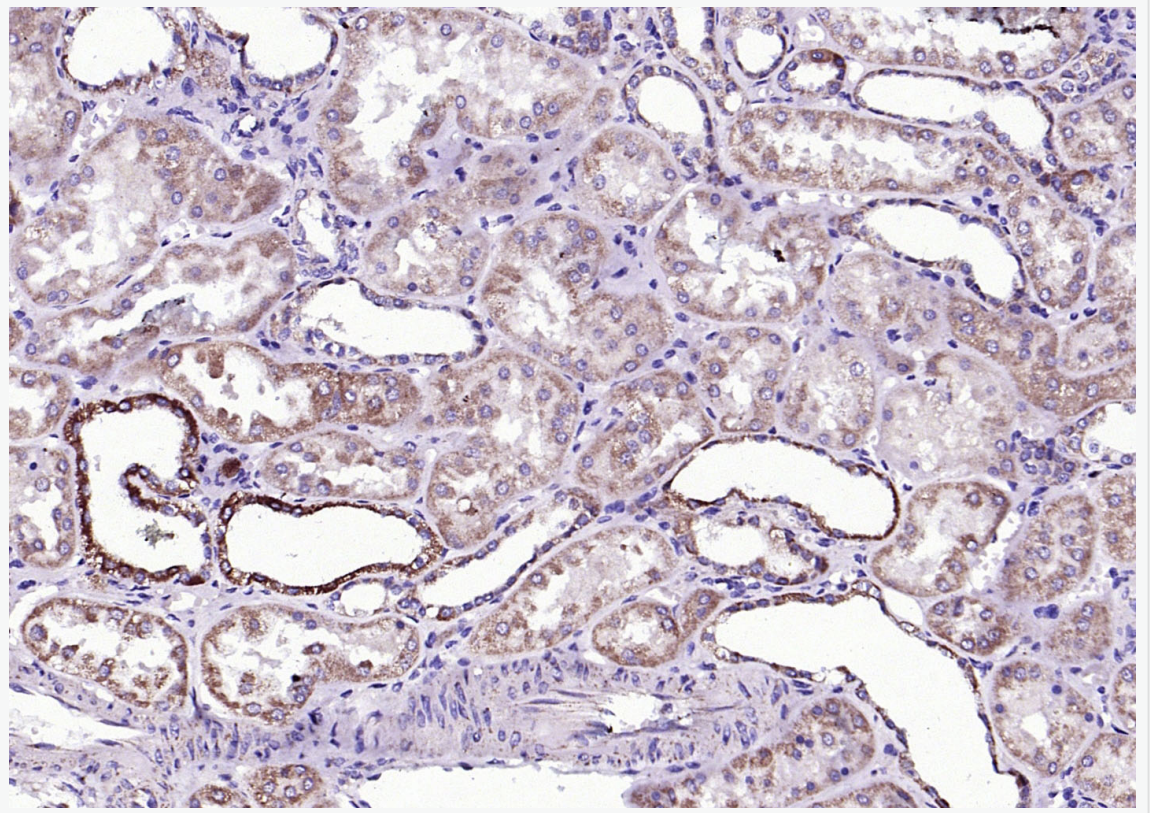
Sample: Brain(Mouse) lysates, 30ug;

Primary: Anti-phospho-BAD(Ser128) (SL0893R) at 1:300 dilution;

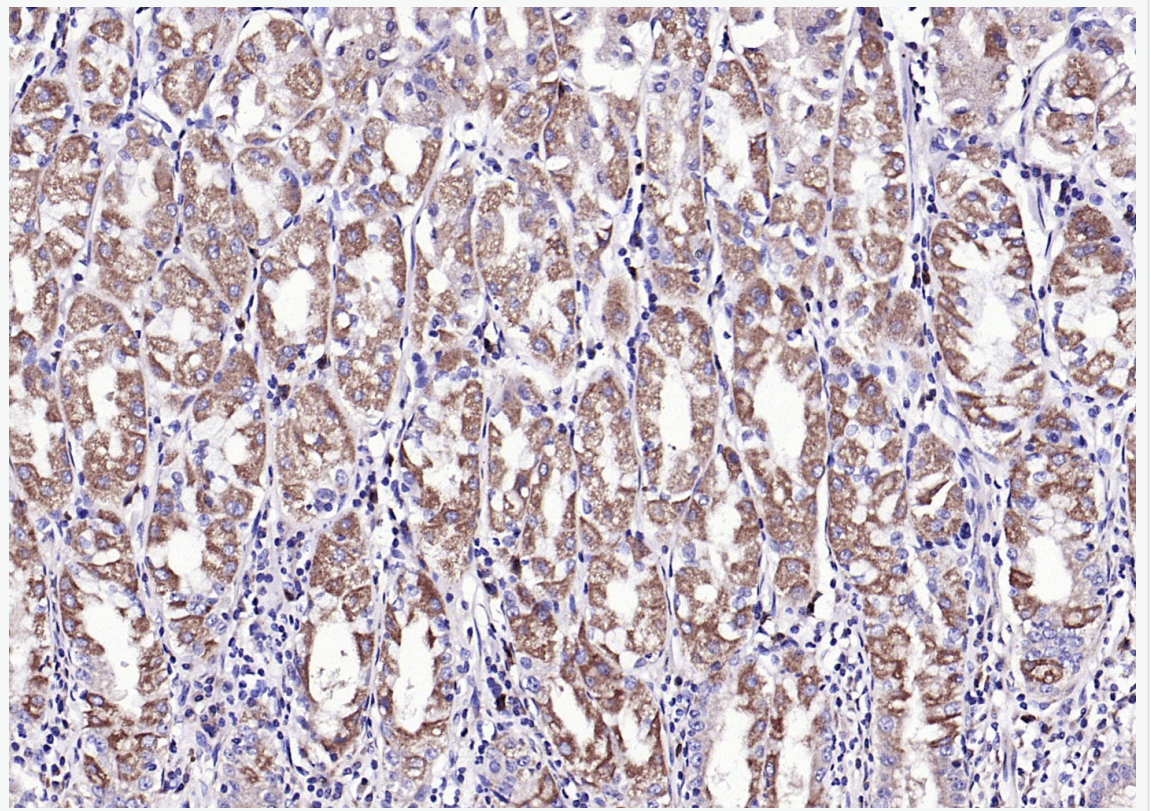
Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0295G-HRP) at 1: 5000 dilution;

Predicted band size : 18kD

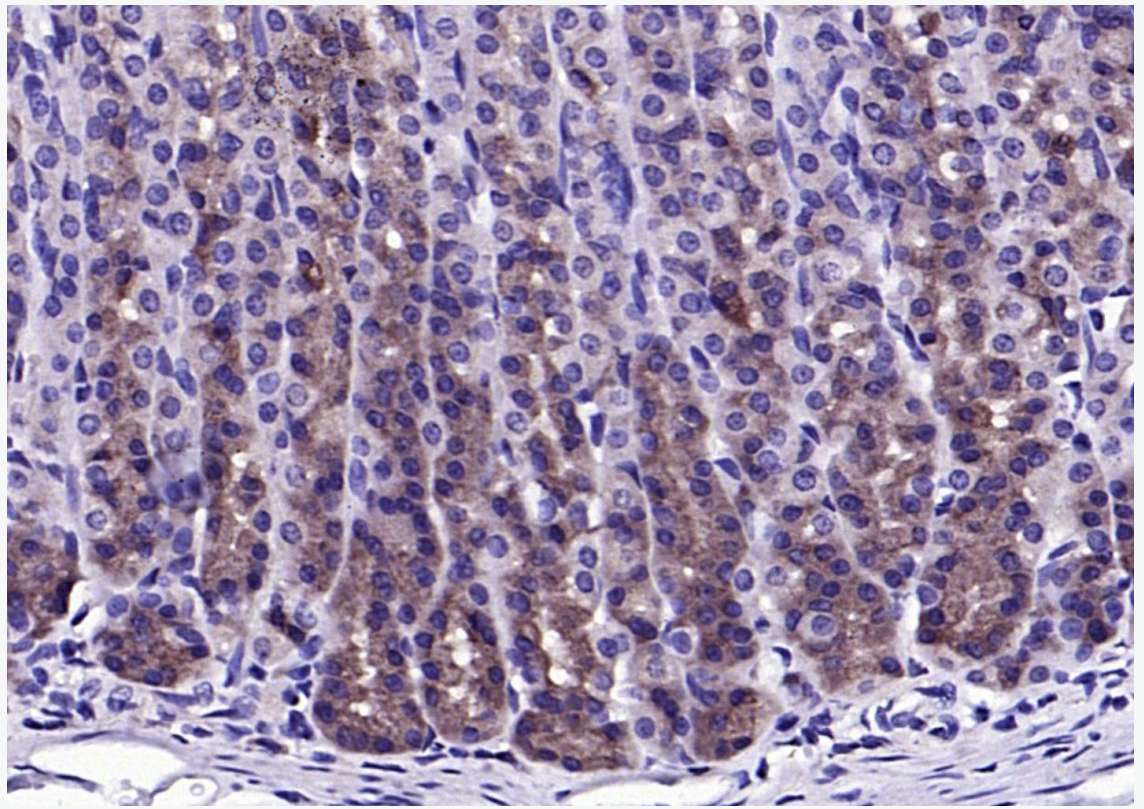
Observed band size : 20kD



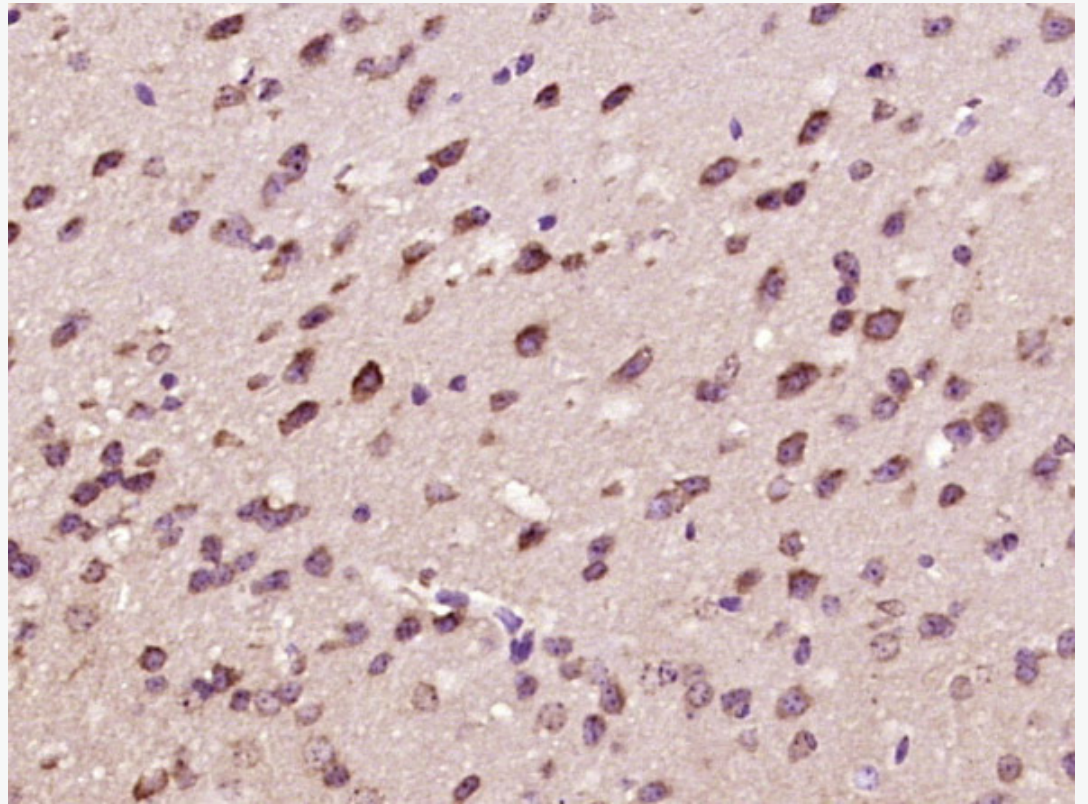
Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-BAD (Ser128)) Polyclonal Antibody, Unconjugated (SL0893R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



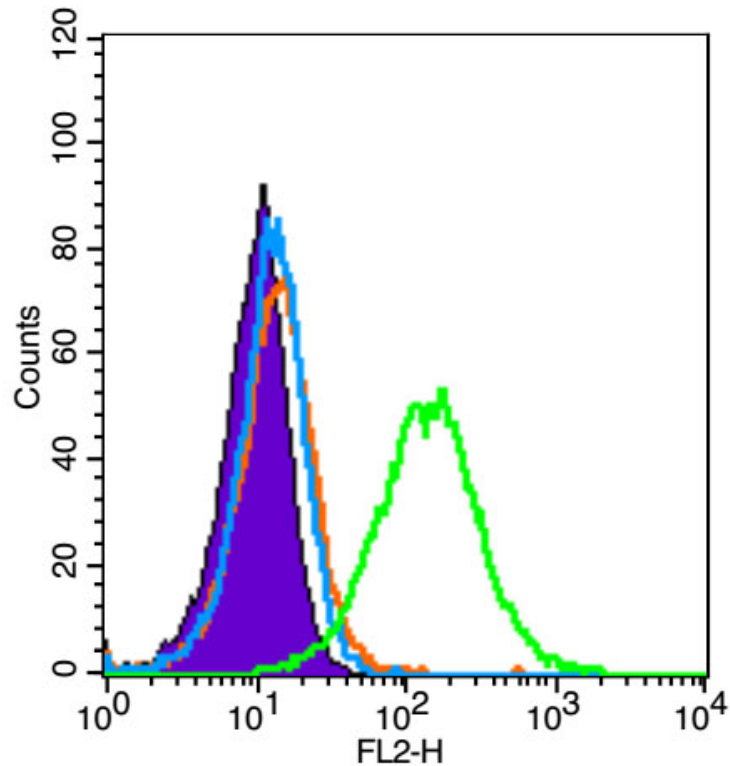
Paraformaldehyde-fixed, paraffin embedded (human gastric); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-BAD (Ser128)) Polyclonal Antibody, Unconjugated (SL0893R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat gastric); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-BAD (Ser128)) Polyclonal Antibody, Unconjugated (SL0893R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (BAD (Ser128)) Polyclonal Antibody, Unconjugated (SL0893R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (Black line): Jurkat (Black).

Primary Antibody (green line): Rabbit Anti-phospho-BAD (Ser128) antibody (SL0893R)

Dilution: $1\mu\text{g}/10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE

Dilution: $1\mu\text{g}/\text{test}$.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature. The cells were then incubated

in 5%BSA to block non-specific protein-protein interactions for 15 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.