



## Rabbit Anti-Bad antibody

SL0892R

<b>Product Name:</b>	Bad
<b>Chinese Name:</b>	相关死亡促进因子Bad抗体
<b>Alias:</b>	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.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3ug/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	18kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Bad:120-204/204
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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.

**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

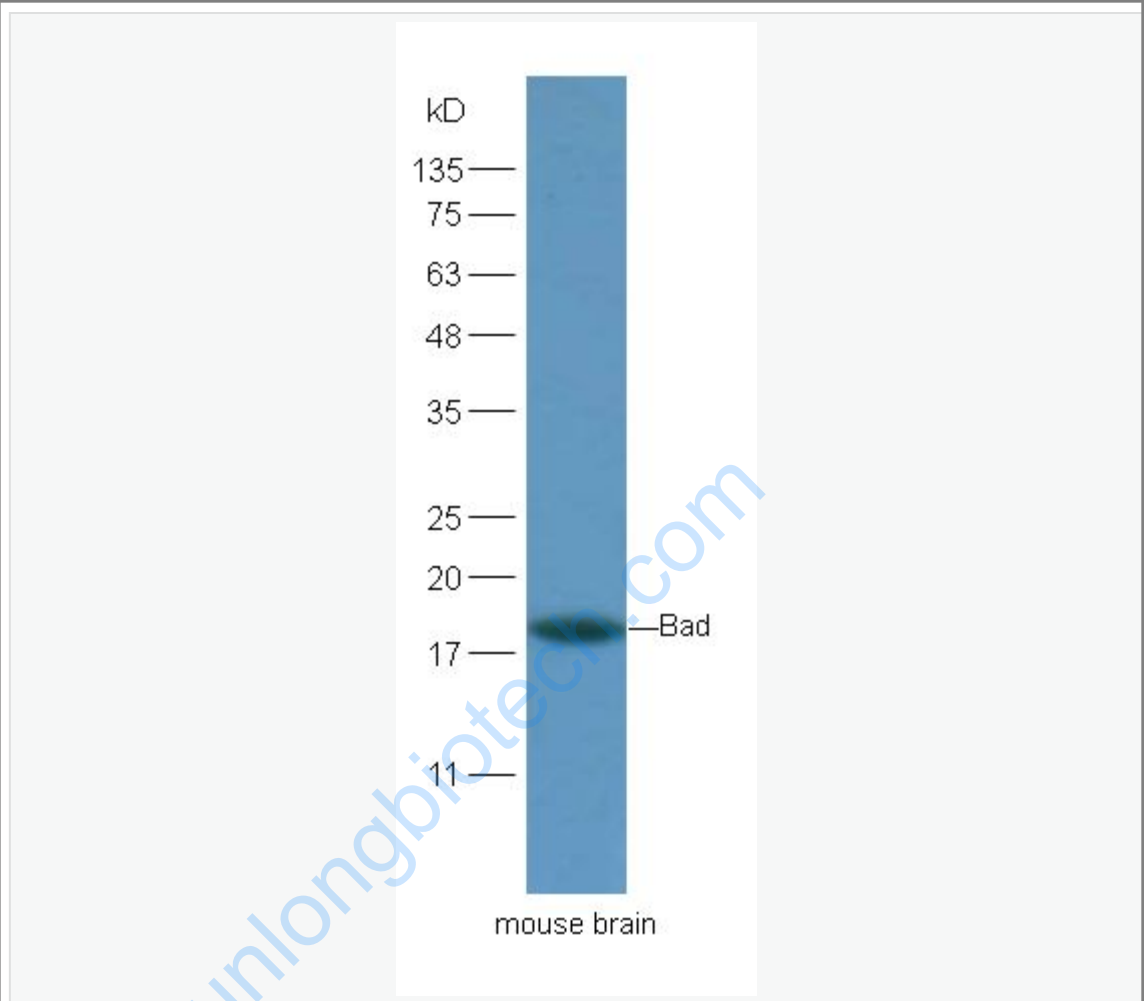
[Unigene: 36696](#)Rat

**Important Note:**

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

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，则细胞耐受凋亡；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。

**Picture:**



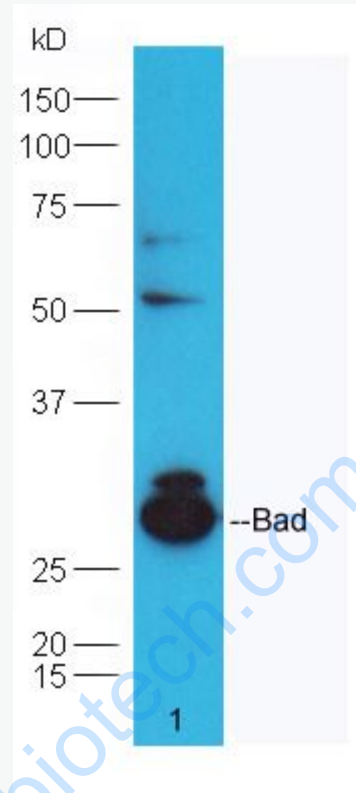
Protein: Brain(Mouse)lysates, 30ug;

Primary: Anti-Bad (SL0892R) at 1:200;

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0892R) at 1: 5000;

Predicted band size : 18 kD

Observed band size : 18 kD



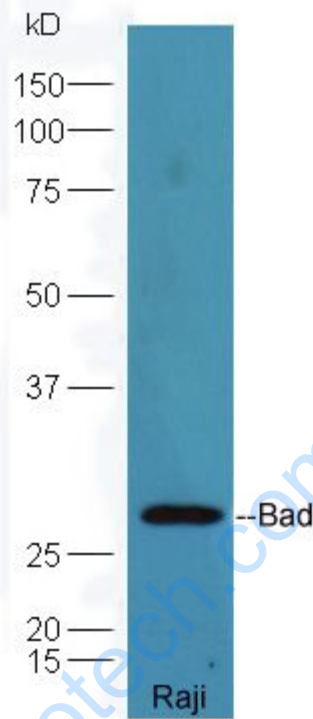
Sample: HeLa Cell lysate 30ug;

Primary: Anti-Bad (SL0892R) at 1:300;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG(SL0892R) at 1:5000;

Predicted band size : 18 kD

Observed band size : 27 kD



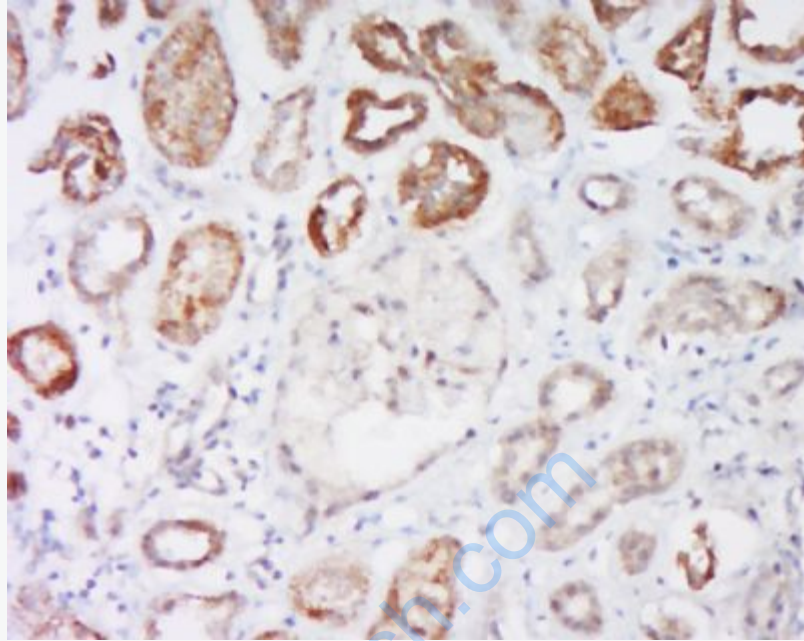
Sample: Raji Cell lysate 30ug;

Primary: Anti-Bad (SL0892R) at 1:300;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG(SL0892R) at 1:5000;

Predicted band size :18 kD

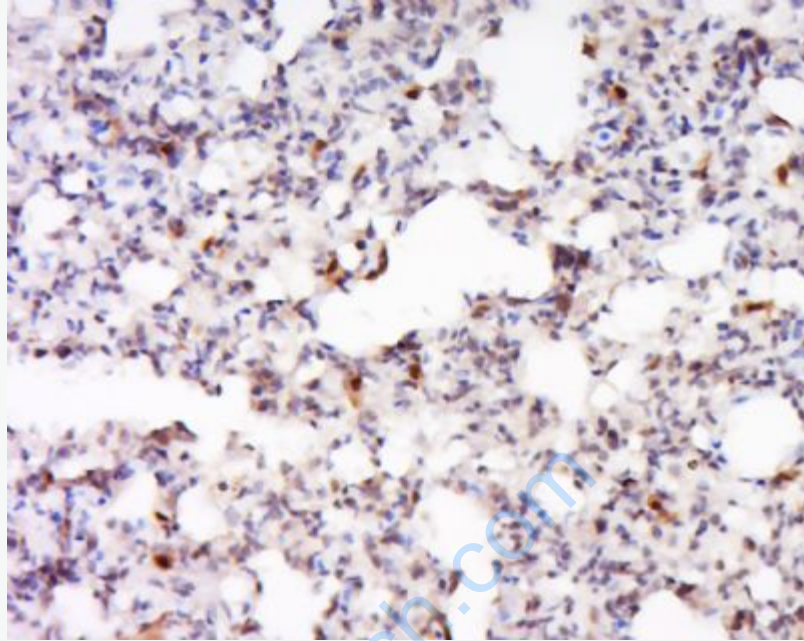
Observed band size : 27 kD



Tissue/cell: Human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

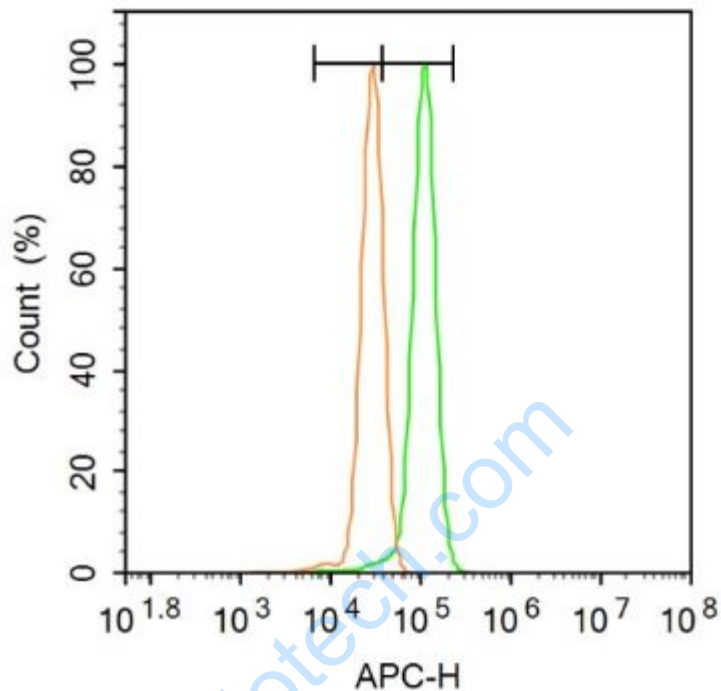
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Bad Polyclonal Antibody, Unconjugated(SL0892R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: Rat lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-Bad Polyclonal Antibody, Unconjugated(SL0892R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining





Blank control: A431(Black).

Primary Antibody (green line): Rabbit Anti-Bad antibody (SL0892R)

Dilution: 1 $\mu$ g /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

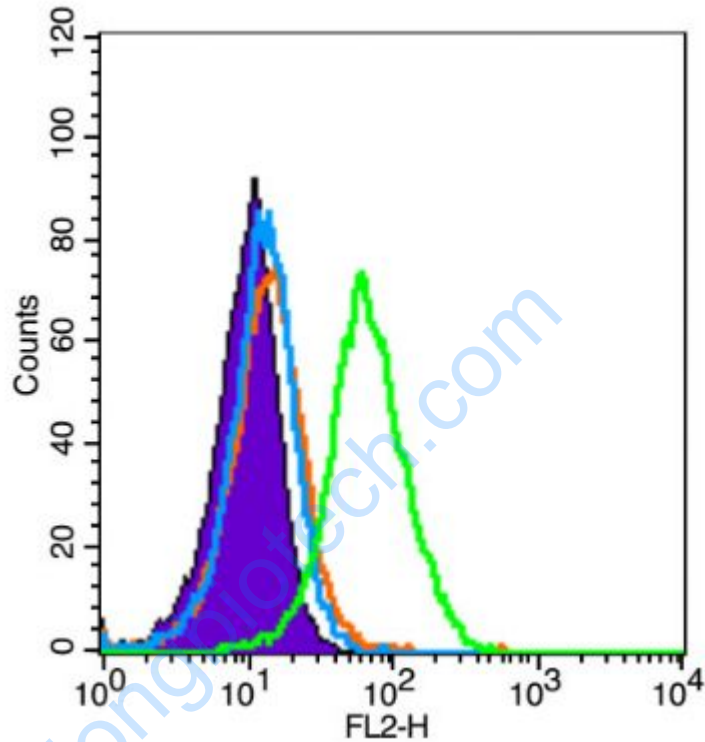
Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 1 $\mu$ g /test.

#### Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 20% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at -20°C .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.



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

Primary Antibody (green line): Rabbit Anti-Bad antibody (SL0892R)

Dilution:  $3\mu\text{g} / 10^6$  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.

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