

Rabbit Anti-Phospho-Bad (Ser118)antibody

SL5216R

Product Name [KO validated anti] Phospho-Bad (Ser118)

Chinese Name 磷酸化相关死亡促进因子抗体

Alias Bad (phospho S118); Bad (phospho Ser118); p-Bad (S118);p- Bad (Ser118); p-Bad (phospho Ser118); 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 KO validated anti

Research Area Tumour Cell biology immunology Neurobiology Signal transduction Apoptosis Mitochondrion

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat, (predicted: Dog, Pig, Cow, Horse, Rabbit,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=2ug/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 Mitochondrion

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated Synthesised phosphopeptide derived from human BAD around the phosphorylation site of Ser118: RM(p-S)DE

Lsotype IgG

Purification affinity purified by Protein G

**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.

PubMed

[PubMed](#)

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. 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

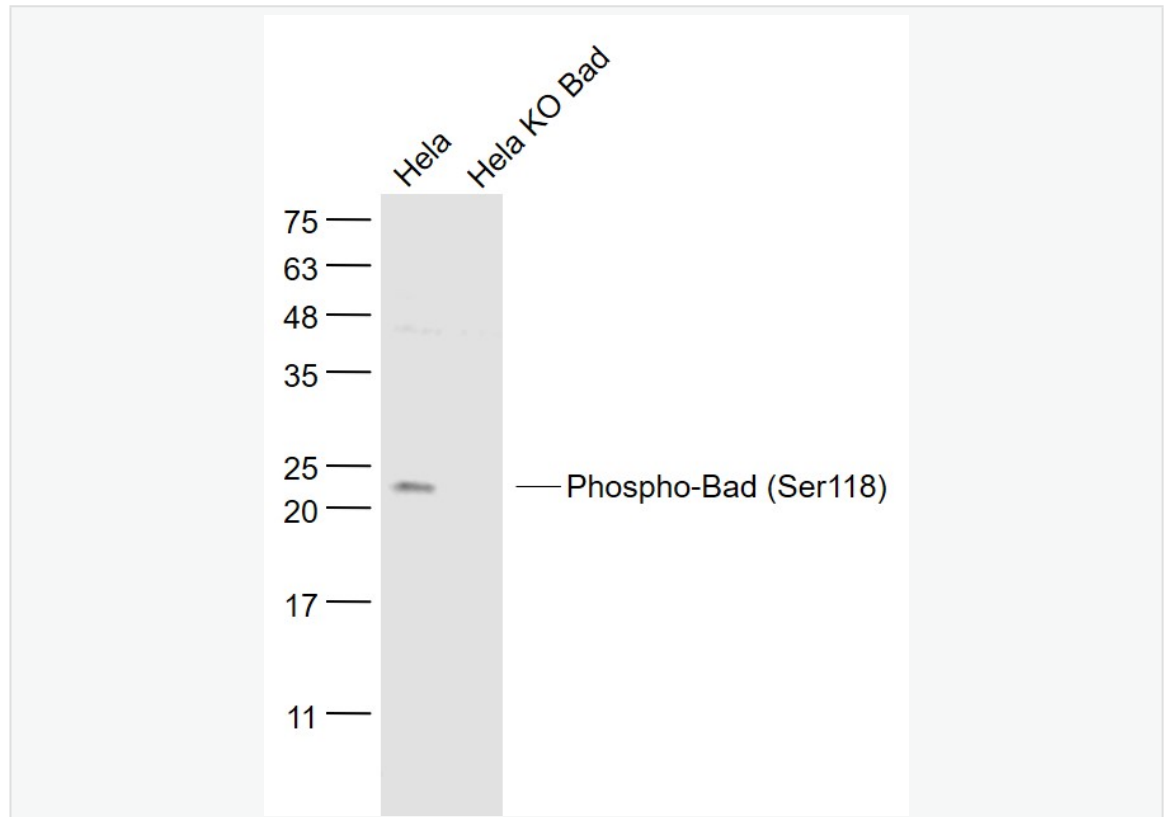
[Unigene: 370254](#) Human

[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。

**Product
Picture**



Sample:

HeLa(Human) Cell Lysate at 30 ug

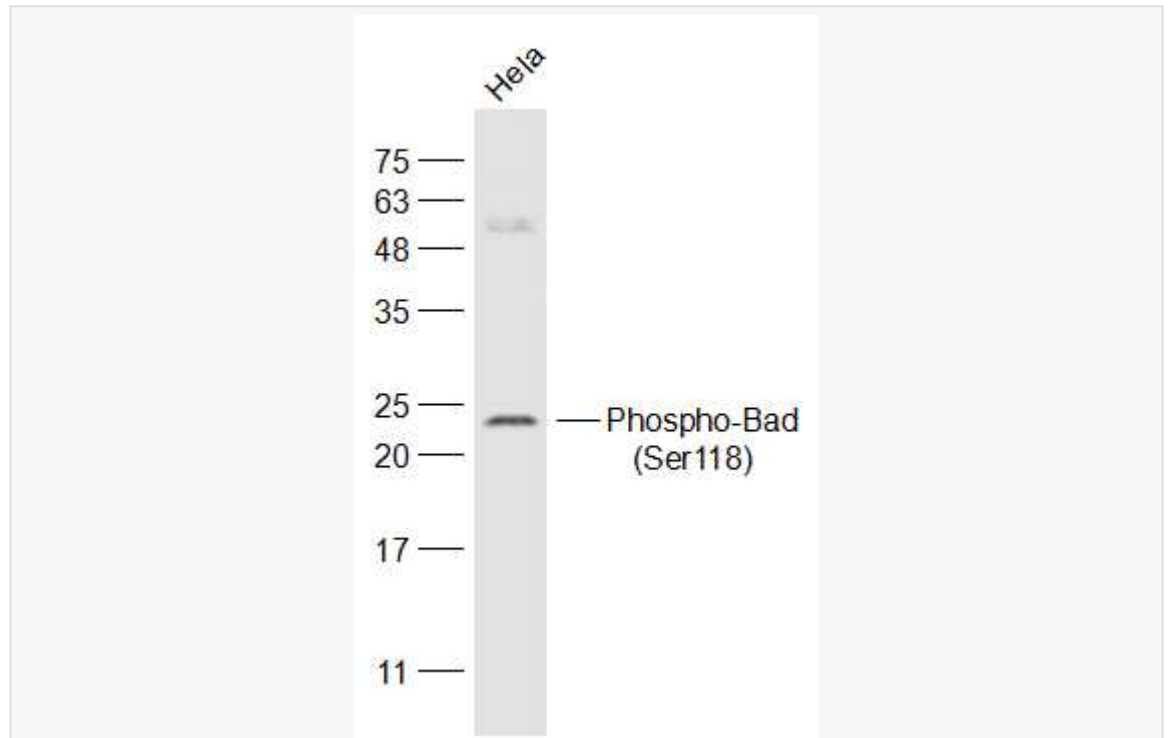
HeLa KO Bad (Human) Cell Lysate at 30 ug

Primary: Anti- Phospho-Bad (Ser118) (SL5216R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 22 kD

Observed band size: 22 kD



Sample:

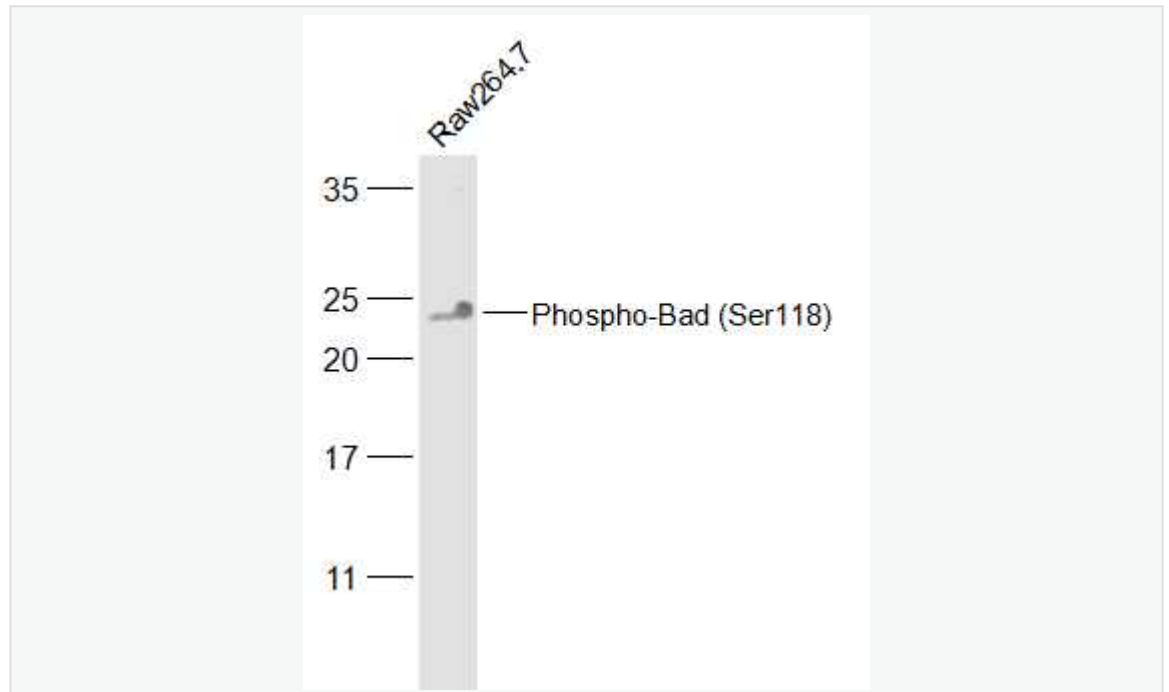
HeLa(Human) Cell Lysate at 30 ug

Primary: Anti-Phospho-Bad (Ser118) (SL5216R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 22 kD

Observed band size: 22 kD



Sample:

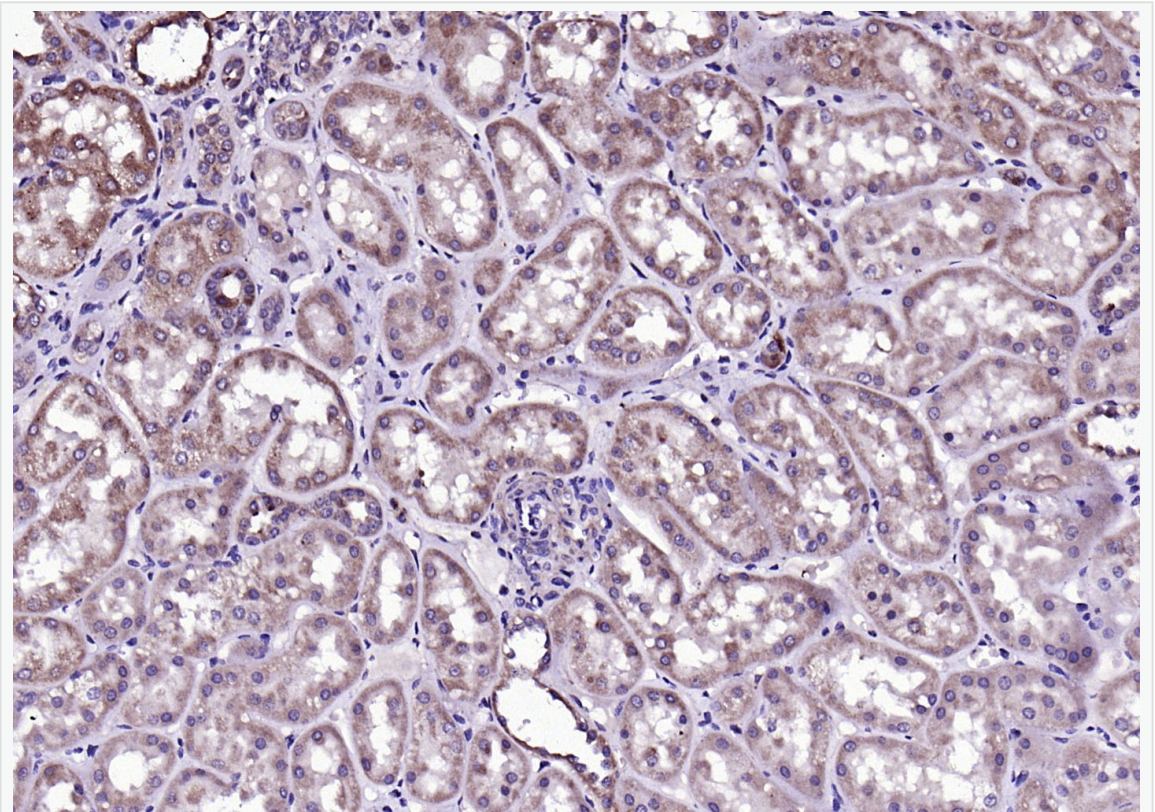
Raw264.7(Mouse) Cell Lysate at 30 ug

Primary: Anti-Phospho-Bad (Ser118) (SL5216R) at 1/500 dilution

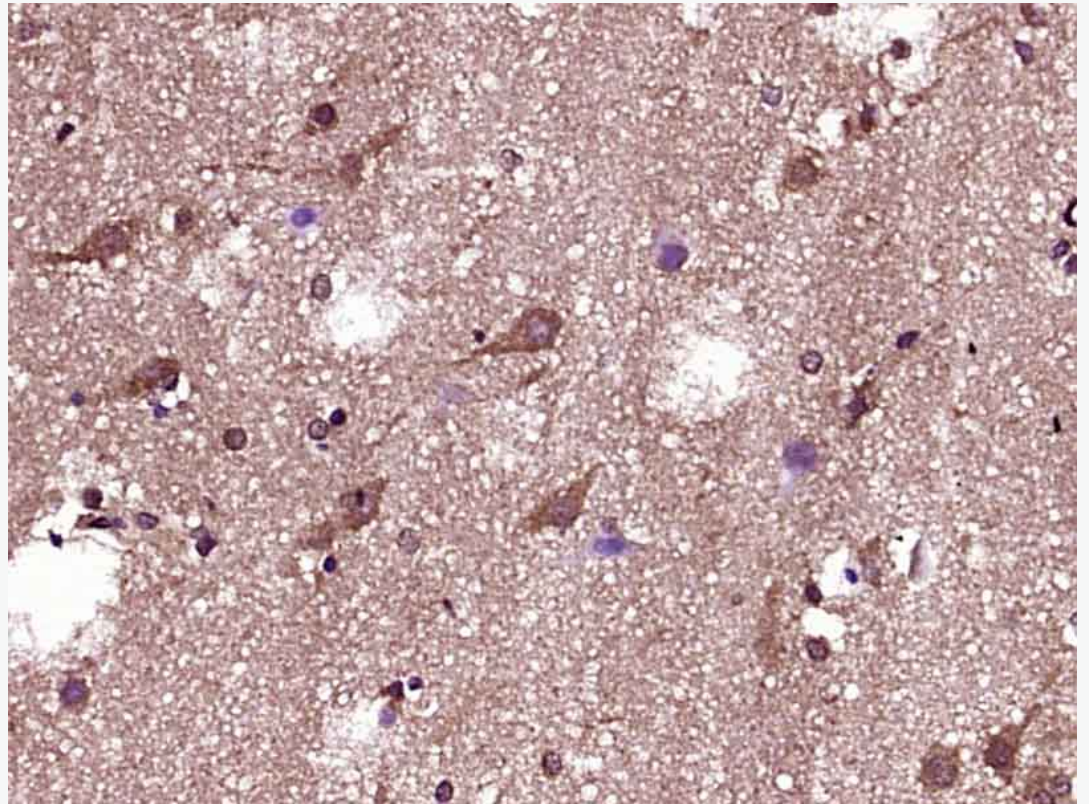
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 22 kD

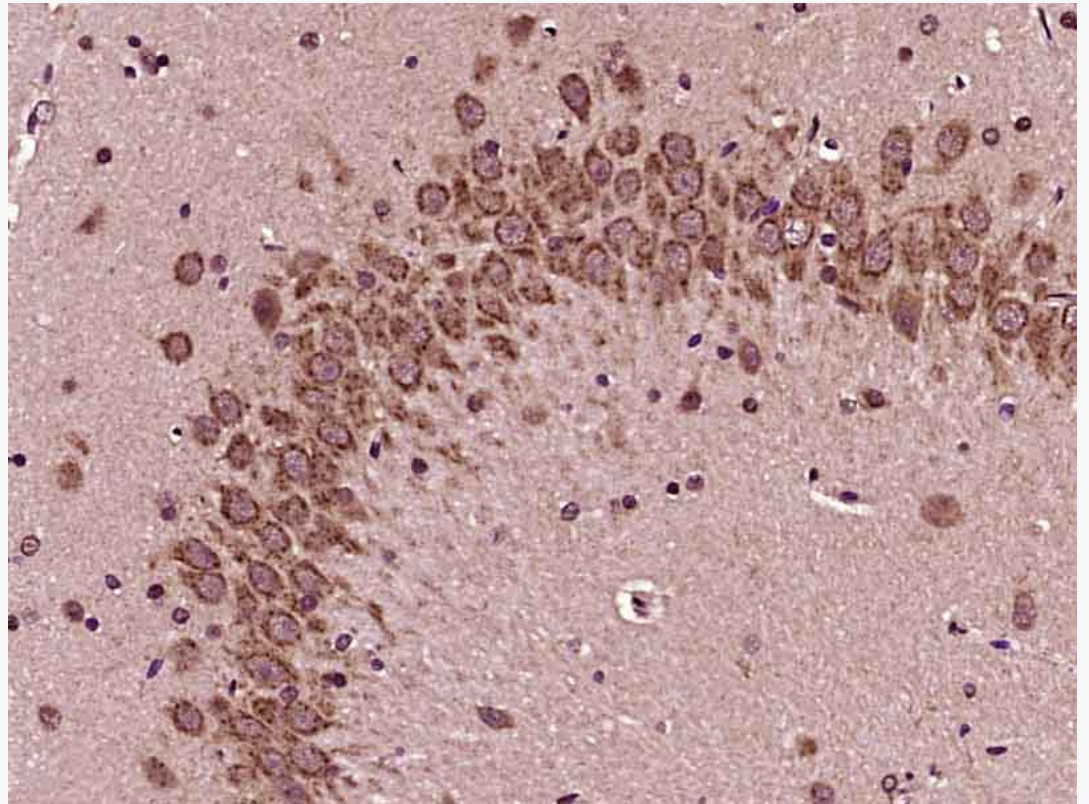
Observed band size: 22 kD



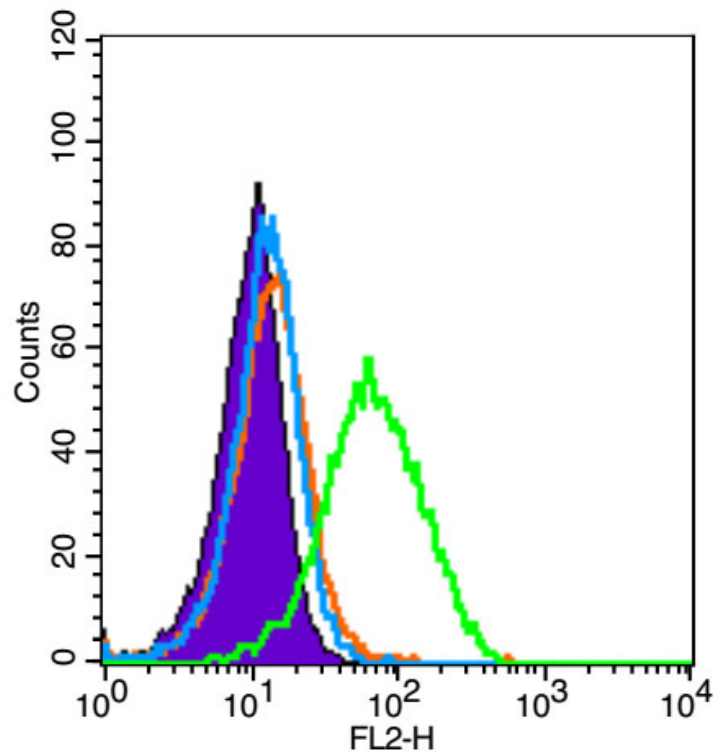
Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-Bad (Ser118)) Polyclonal Antibody, Unconjugated (SL5216R) 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 brain glioma); 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 (Ser118)) Polyclonal Antibody, Unconjugated (SL5216R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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 (Ser118)) Polyclonal Antibody, Unconjugated (SL5216R) 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-Bad(Ser118) antibody (SL5216R)

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

Isotype Control Antibody (orange line): Rabbit IgG .

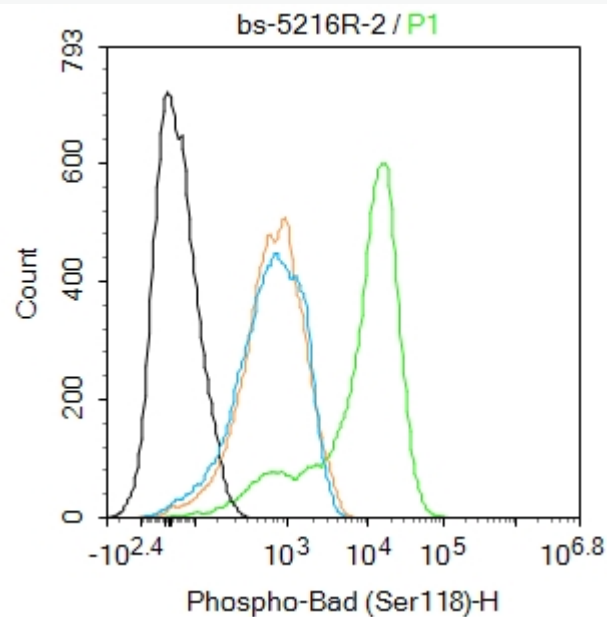
Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE

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.



Blank control:Jurkat.

Primary Antibody (green line): Rabbit Anti-Phospho-Bad (Ser118) antibody (SL5216R)

Dilution: 2ug/Test;

Secondary Antibody : Goat anti-rabbit IgG-FITC

Dilution: 0.5ug/Test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% 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 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.