SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

# Rabbit Anti-Bad antibody

SL0892R

| | |
|---|---|
| **Product Name** | Bad |
| **Chinese Name** | 相关死亡促进因子 Bad 抗体 |
| **Alias** | 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. |
| **Research Area** | Tumour Cell biology Neurobiology Signal transduction Apoptosis The new supersedes the old |
| **Immunogen Species** | Rabbit |
| **Clonality** | Polyclonal |
| **React Species** | Human, Mouse, Rat, |
| **Applications** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=3ug/Test<br>（Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Theoretical molecular weight** | 18kDa |
| **Cellular localization** | cytoplasmic The cell membrane |
| **Form** | Liquid |
| **Concentration** | 1mg/ml |
| **immunogen** | KLH conjugated synthetic peptide derived from human Bad: 120-204/204 |
| **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℃. 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

**Product Detail**

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 andSer-134 in response to survival stimuli, which blocks itspro-apoptotic activity. Phosphorylation on Ser-99 or Ser-75promotes heterodimerization with 14-3-3 proteins. This interactionthen facilitates the phosphorylation at Ser-118, a site within theBH3 motif, leading to the release of Bcl-X(L) and the promotion ofcell 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 blockedby the apoptotic C-terminus cleavage product of PKN2 generated bycaspases-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

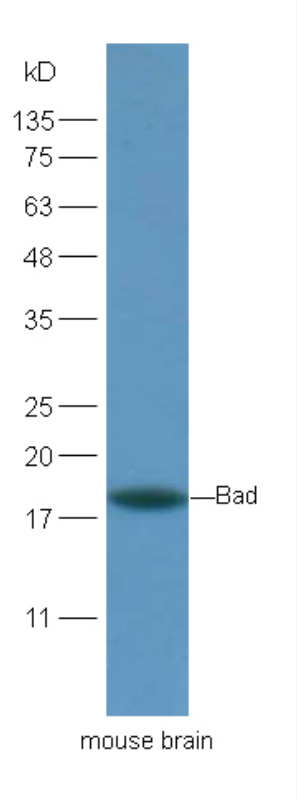
Unigene: 4387 Mouse

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≥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。

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

**Product Picture**




Protein: Brain(Mouse)lysates, 30ug;

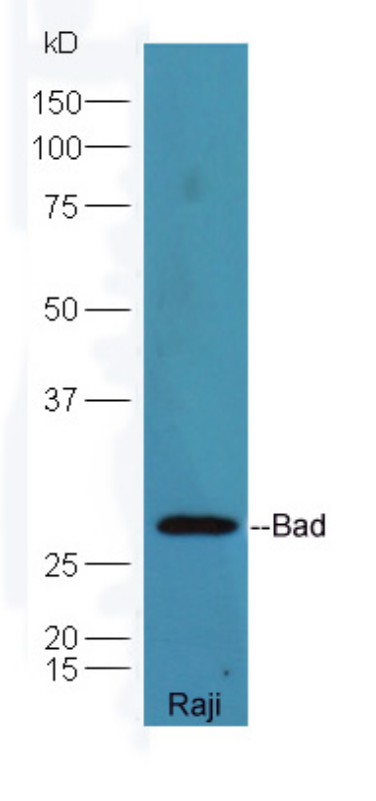
Primary: Anti-Bad (SL0892R) at 1:200;

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

Predicted band size : 18 kD

Observed band size : 18 kD

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com




Sample: Raji Cell lysate 30ug;

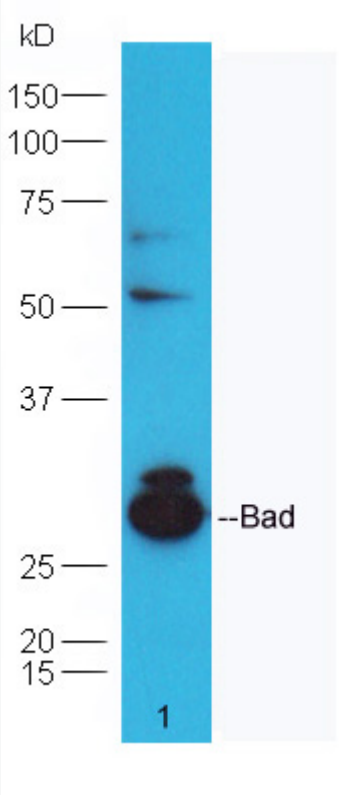
Primary: Anti-Bad (SL0892R) at 1:300;

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

Predicted band size :18 kD

Observed band size : 27 kD

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com




Sample: Hela Cell lysate 30ug;

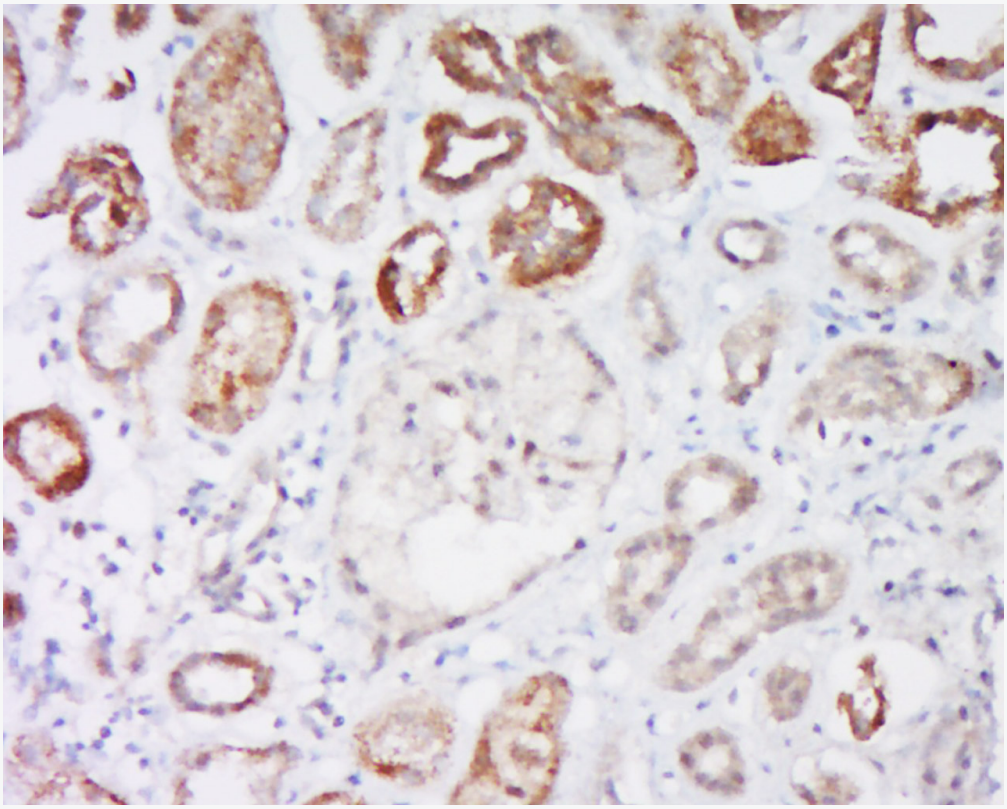
Primary: Anti-Bad (SL0892R) at 1:300;

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

Predicted band size :18 kD

Observed band size : 27 kD

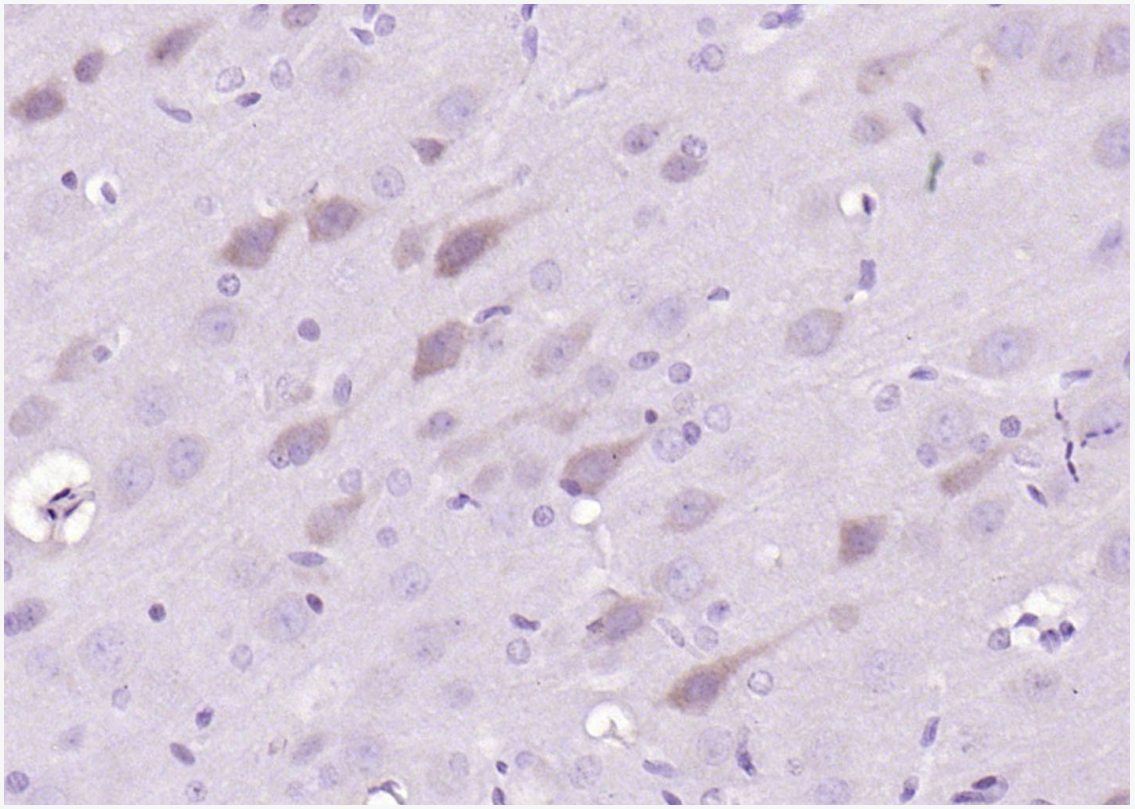
SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com



Tissue/cell: Human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 1M, 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℃ for 20 min;

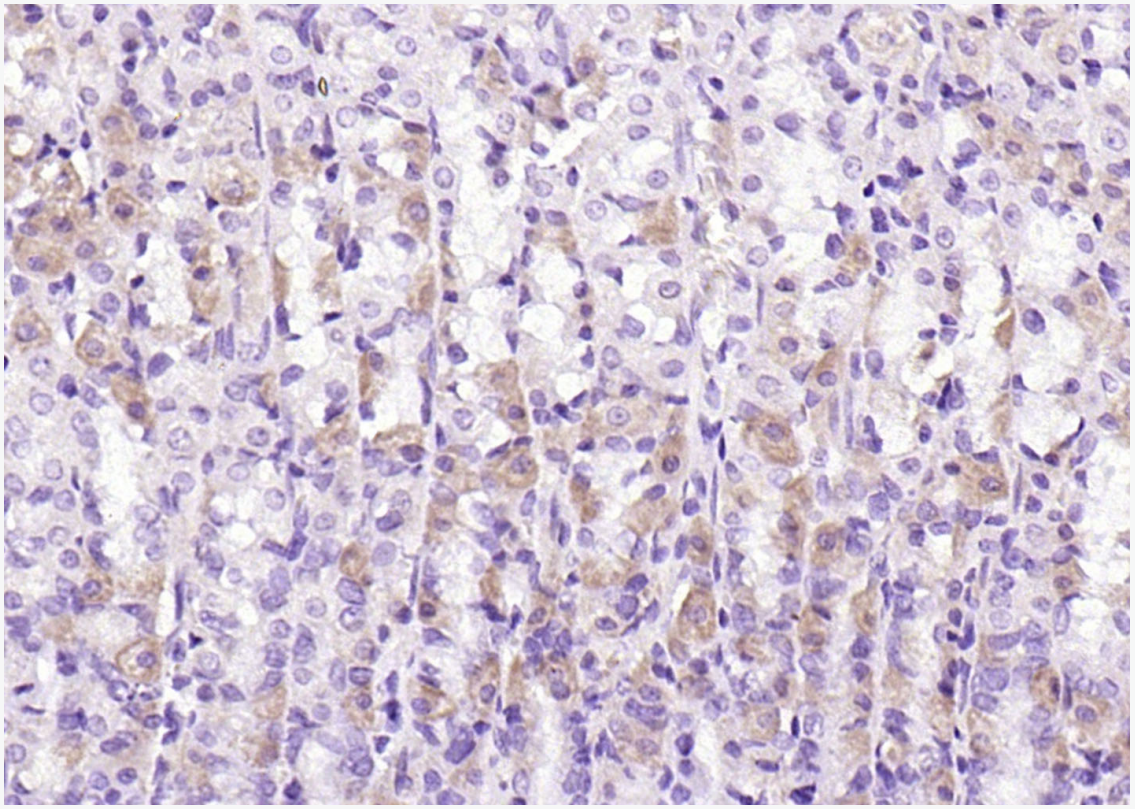
Incubation: Anti-Bad Polyclonal Antibody, Unconjugated(SL0892R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

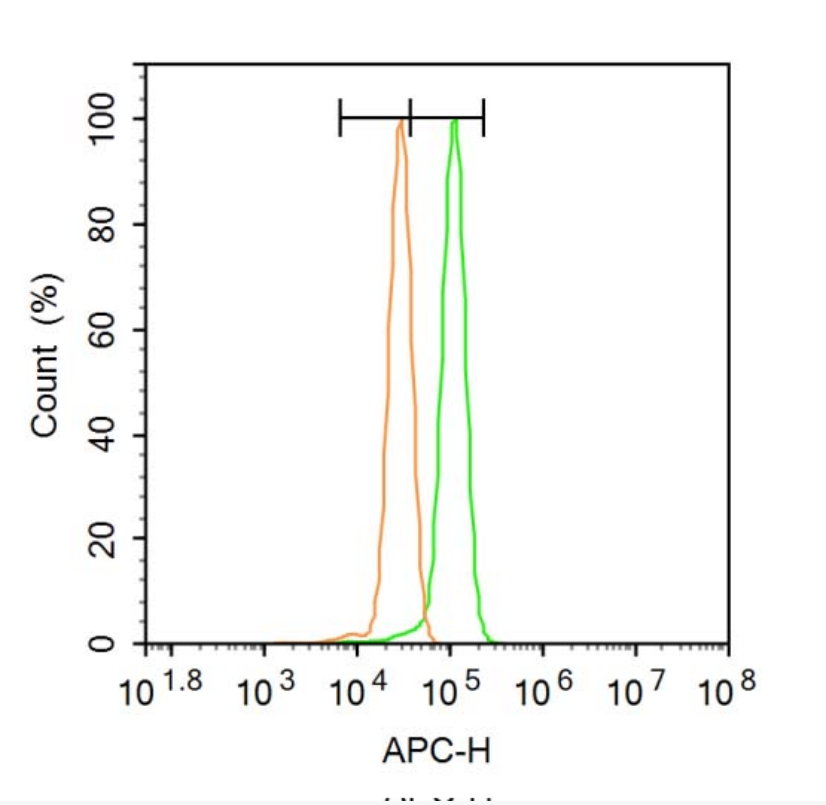


Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bad) Polyclonal Antibody, Unconjugated (SL0892R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com



Paraformaldehyde-fixed, paraffin embedded (rat stomach); 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) Polyclonal Antibody, Unconjugated (SL0892R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.




Blank control: A431(Black).

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

Dilution: 1µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

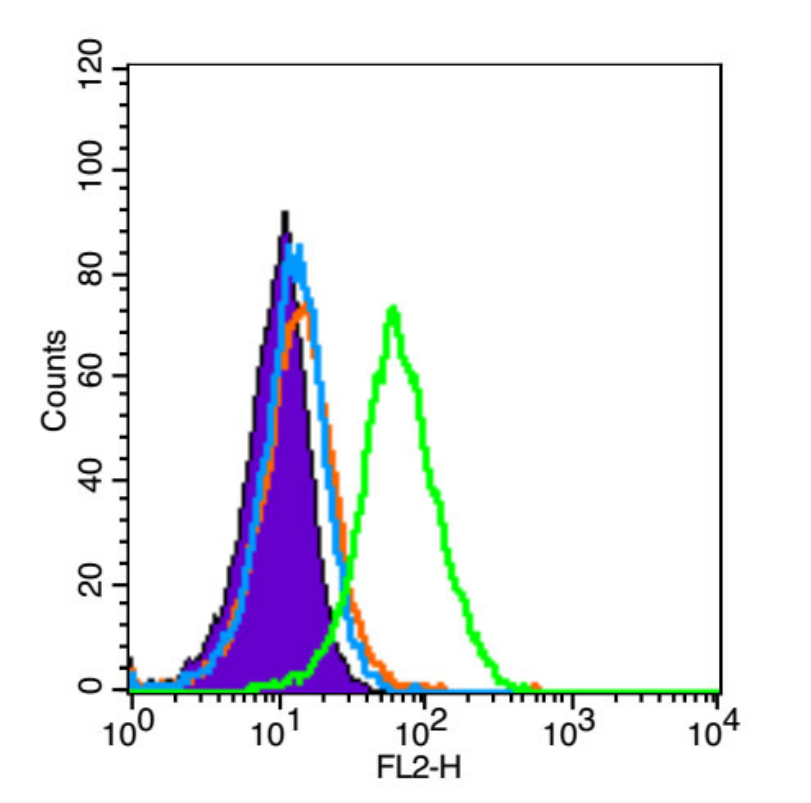
Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 1µg /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 -20℃ .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: 3µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

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

Dilution: 1µg /test.

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

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.