# abcam

### **Product datasheet**

## Anti-JNK2 antibody [EP1595Y] - BSA and Azide free ab227986

**敲除 验证** 重组 RabMAb

<u>10 References</u> 7 图像

概述		
产品名称	Anti-JNK2 <b>抗体</b> [EP1595Y] - BSA and Azide free	
描述	兔单 <b>克隆抗体</b> [EP1595Y] to JNK2 - BSA and Azide free	
宿主	Rabbit	
经测试应 <b>用</b>	适用于: Flow Cyt (Intra), WB, IP, IHC-P, ELISA	
种属反应性	与反应: Human, Recombinant fragment	
	预测可用于: Mouse, Rat 🛛 📤	
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
<b>阳性</b> 对照	WB: HEK293T, MCF7, HAP1 and HeLa cell lysates. IP: HeLa cell lysate. Flow Cyt (intra): HeLa cells. IHC-P: Human breast carcinoma tissue.	
<b>常</b> 规说 <b>明</b>	ab227986 is the carrier-free version of <u>ab76125</u> .	
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.	
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.	
	Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.	
	This product is compatible with the Maxpar <sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar <sup>®</sup> is a trademark of Fluidigm Canada Inc.	
性能		
形式	Liquid	
存 <b>放</b> 说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.	
存储溶液	pH: 7.20	

Constituent: PBS

无载体	是
纯 <b>度</b>	Protein A purified
克隆	单 <b>克隆</b>
<b>克隆</b> 编号	EP1595Y
同种型	lgG

应用

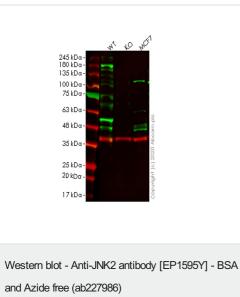
#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab227986于以下的经测试应用

#### "应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration. <u>ab199376</u> - Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 48 kDa.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ELISA		Use at an assay dependent concentration.

<b>靶</b> 标	
功能	Responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, primarily components of AP-1 such as c-Jun and ATF2 and thus regulates AP-1 transcriptional activity. In T-cells, JNK1 and JNK2 are required for polarized differentiation of T-helper cells into Th1 cells. JNK2 isoforms display different binding patterns: alpha-1 and alpha-2 preferentially bind to c-Jun, whereas beta-1 and beta-2 bind to ATF2. However, there is no correlation between binding and phosphorylation, which is achieved at about the same efficiency by all isoforms. JUNB is not a substrate for JNK2 alpha-2, and JUND binds only weakly to it.
序列相似性	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Subfamily. Contains 1 protein kinase domain.
结 <b>构域</b>	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
<b>翻</b> 译 <b>后修</b> 饰	Dually phosphorylated on Thr-183 and Tyr-185, which activates the enzyme. Autophosphorylated in vitro.



All lanes : Anti-JNK2 antibody [EP1595Y] (ab76125) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate Lane 2 : MAPK9 knockout HEK293T cell lysate Lane 3 : MCF7 cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

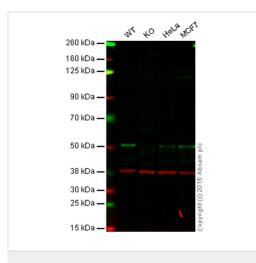
All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) at 1/10000 dilution

Predicted band size: 48 kDa Observed band size: 48 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab76125</u>).

Lanes 1-3: Merged signal (red and green). Green - <u>ab76125</u> observed at 48 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

<u>ab76125</u> Anti-JNK2 antibody [EP1595Y] was shown to specifically react with JNK2 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line <u>ab266355</u> (knockout cell lysate <u>ab257527</u>) was used. Wild-type and JNK2 knockout samples were subjected to SDS-PAGE. <u>ab76125</u> and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-JNK2 antibody [EP1595Y] - BSA and Azide free (ab227986)

This WB data was generated using the same anti-JNK2 antibody clone, EP1595Y, in a different buffer formulation (cat# <u>ab76125</u>).

Lane 1: Wild-type HAP1 cell lysate (20 µg)

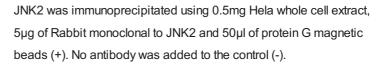
Lane 2: JNK2 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: MCF7 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab76125</u> observed at 54 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

**ab76125** was shown to specifically react with JNK2 when JNK2 knockout samples were used. Wild-type and JNK2 knockout samples were subjected to SDS-PAGE. **ab76125** and **ab8245** (loading control to GAPDH) were diluted 1/2500 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



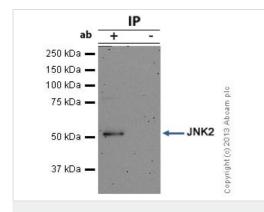
The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with **ab76125**.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (<u>ab99697</u>).

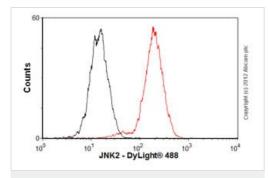
Band: 48kDa; JNK2

This data was developed using the same antibody clone in a



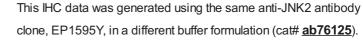
Immunoprecipitation - Anti-JNK2 antibody [EP1595Y] - BSA and Azide free (ab227986)

different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab76125</u>).



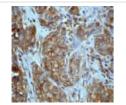
Flow Cytometry (Intracellular) - Anti-JNK2 antibody [EP1595Y] - BSA and Azide free (ab227986) Overlay histogram showing HeLa cells stained with <u>**ab76125**</u> (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (<u>**ab76125**</u>, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight<sup>®</sup> 488 goat anti-rabbit IgG (H+L) (<u>**ab96899**</u>) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab76125</u>).



<u>ab76125</u> at 1/100 dilution staining JNK2 in human breast carcinoma by Immunohistochemistry, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-JNK2 antibody [EP1595Y] - BSA and Azide free (ab227986)



This data was developed using <u>ab76125</u>, the same antibody clone in a different buffer formulation.

ELISA analysis of Human JNK2 recombinant protein at 250 ng/mL with <u>ab76125</u>. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

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