abcam

Product datasheet

Anti-p38 (phospho T180 + Y182) antibody ab4822

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概述

产品名称	Anti-p38 (phospho T180 + Y182)**抗体**
描述	**兔多克隆抗体**to p38 (phospho T180 + Y182)
宿主	Rabbit
经测试应用	**适用于:** IHC-P, ICC/IF, WB
种属反应性	**与反应:** Rat, Human **预测可用于:** Mouse, Dog, Carp, Monkey
免疫原	Synthetic peptide corresponding to Human p38 (phospho T180 + Y182). p38 is dually phosphorylated and therefore fully activated by MEK3 and MEK6 on threonine 180 and tyrosine 182 within the activation loop. Database link: **Q16539** (Peptide available as **ab5253**)
阳性对照	WB: HeLa, A431, COLO 205, A549 and A549 cell lysate; HEK-293 (human epithelial cell line from embryonic kidney) cells. IHC-P: Human brain tissue, human heart tissue, rat heart tissue. ICC: SH-SY5Y (human neuroblastoma cell line from bone marrow) cells.
常规说明	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol, 0.1% BSA BSA is IgG and protease free. PBS without Mg2+ and Ca2+.

纯度	Protein A purified
纯化说明	Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using i) non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated p38, and ii) a JNK-derived peptide that is phosphorylated at threonine 183 and tyrosine 185. The final product is generated by affinity chromatography using a p38-derived peptide that is phosphorylated at threonine 180 and tyrosine 182.
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab4822于以下的经测试应用**

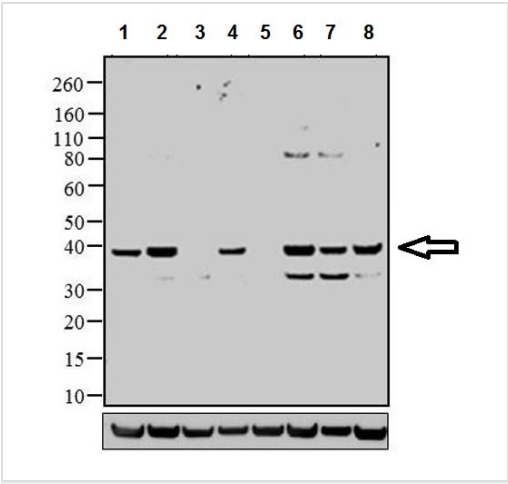
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/10 - 1/100.
ICC/IF		1/250.
WB	★★★☆☆ (3)	1/1000. Predicted molecular weight: 38 kDa.

靶标

功能	Responds to activation by environmental stress, pro-inflammatory cytokines and lipopolysaccharide (LPS) by phosphorylating a number of transcription factors, such as ELK1 and ATF2 and several downstream kinases, such as MAPKAPK2 and MAPKAPK5. Plays a critical role in the production of some cytokines, for example IL-6. May play a role in stabilization of EPO mRNA during hypoxic stress. Isoform Mxi2 activation is stimulated by mitogens and oxidative stress and only poorly phosphorylates ELK1 and ATF2. Isoform Exip may play a role in the early onset of apoptosis.
组织特异性	Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung, liver and kidney.
序列相似性	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.
结构域	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
翻译后修饰	Dually phosphorylated on Thr-180 and Tyr-182, which activates the enzyme. Phosphorylated upon DNA damage, probably by ATM or ATR.
细胞定位	Cytoplasm. Nucleus.

图片



Western blot - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

All lanes : Anti-p38 (phospho T180 + Y182) antibody (ab4822) at 1/1000 dilution

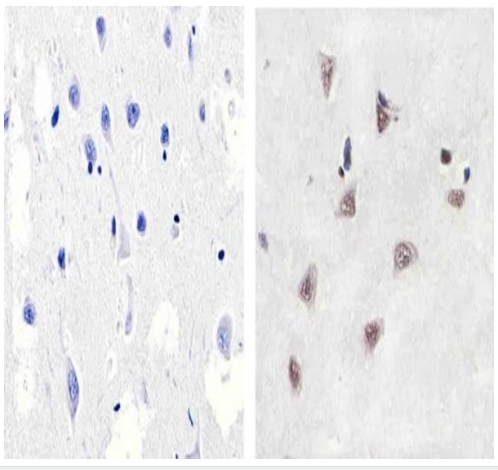
Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate
Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) exposed for 40 min with UV, cell lysate
Lane 3 : A431 (human epidermoid carcinoma cell line) cell lysate
Lane 4 : A431 (human epidermoid carcinoma cell line) exposed for 40 min with UV, cell lysate
Lane 5 : COLO 205 (human colon adenocarcinoma cell line) cell lysate
Lane 6 : COLO 205 (human colon adenocarcinoma cell line) exposed for 40 min with UV, cell lysate
Lane 7 : A549 (human lung carcinoma cell line) cell lysate
Lane 8 : A549 (human lung carcinoma cell line) exposed for 40 min with UV, cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG HRP at 1/5000 dilution

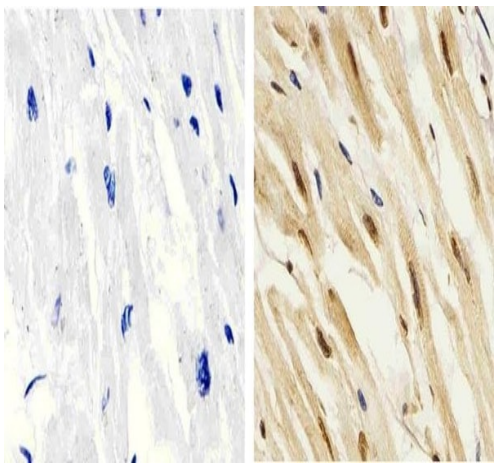
Developed using the ECL technique.

Predicted band size: 38 kDa



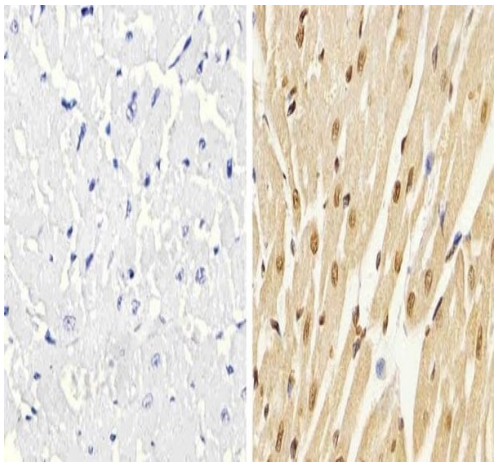
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

Paraffin-embedded human brain tissue stained for p38 (phospho T180 + Y182) using ab4822 (right panel) at 1/100 dilution in immunohistochemical analysis followed by HRP-conjugated secondary antibody and DAB staining. Negative control (left panel) staining without primary antibody.



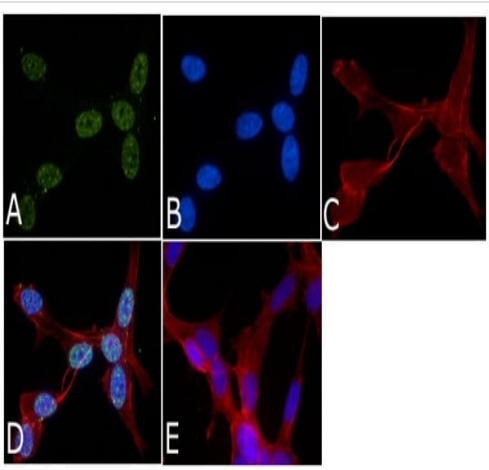
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

Paraffin-embedded human heart tissue stained for p38 (phospho T180 + Y182) using ab4822 (right panel) at 1/20 dilution in immunohistochemical analysis followed by HRP-conjugated secondary antibody and DAB staining. Negative control (left panel) staining without primary antibody.



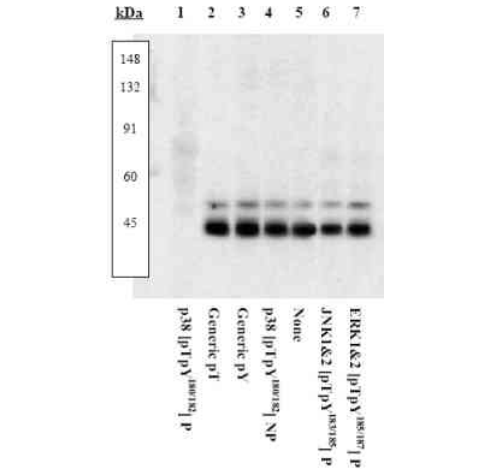
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

Paraffin-embedded rat heart tissue stained for p38 (phospho T180 + Y182) using ab4822 (right panel) at 1/20 dilution in immunohistochemical analysis followed by HRP-conjugated secondary antibody and DAB staining. Negative control (left panel) staining without primary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

4% PFA-fixed, Triton X-100 permeabilized SH-SY5Y (human neuroblastoma cell line from bone marrow) cells labeling p38 (phospho T180 + Y182) (Panel A: green) using ab4822 at 1 µg/mL in ICC/IF. Secondary antibody: Alexa Flour® 488 Goat Anti-Rabbit IgG at 1/400 dilution. Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Alexa Fluor® 594 Phalloidin. Panel d is a merged image showing nuclear localization. Panel e is a no primary antibody control.



Western blot - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

Peptide Competition: Extracts prepared from HEK-293 (human epithelial cell line from embryonic kidney) cells treated with UV irradiation were resolved on a 10% Tris-glycine gel and transferred to nitrocellulose. Membranes were blocked with a 5% BSA-TBST buffer overnight at 4°C, then were incubated with 0.50 µg/mL ab4822 for two hours at room temperature in a 3% BSA-TBST buffer, following its prior incubation with: the peptide immunogen (1), a generic phosphothreonine containing peptide (2), a generic phosphotyrosine-containing peptide (3), the non-phosphorylated peptide corresponding to the phosphopeptide (4), no peptide (5), the phosphorylated peptide derived from the corresponding region of JNK 1 & 2 (6), and, the phosphorylated peptide derived from the corresponding region of ERK 1 & 2 (7). After washing, membranes were incubated with goat F(ab')2 antirabbit IgG alkaline phosphatase and the signal was detected using the Tropix WesternStar method. The data show that only the phosphopeptide

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