# abcam

### Product datasheet

# Anti-p38 (phospho T180 + Y182) antibody ab4822

★★★★★ 5 Abreviews 171 References 画像数6

製品の概要

製品名 Anti-p38 (phospho T180 + Y182) antibody

製品の詳細 Rabbit polyclonal to p38 (phospho T180 + Y182)

由来種 Rahhit

アプリケーション 適用あり: IHC-P, ICC/IF, WB

種交差性 交差種: Rat, Human

交差が予測される動物種: 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)

ポジティブ・コントロール 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.

特記事項 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

製品の特性

製品の状態

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー 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+.

精製度 Protein A purified

特記事項(精製) 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.

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab4822の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/10 - 1/100.
ICC/IF		1/250.
WB	★★★☆☆(3)	1/1000. Predicted molecular weight: 38 kDa.

#### ターゲット情報

機能 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.

組織特異性 Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung, liver

and kidney.

配列類似性 Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase

subfamily.

Contains 1 protein kinase domain.

ドメイン The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the

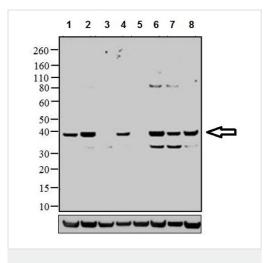
MAP kinases.

翻訳後修飾 Dually phosphorylated on Thr-180 and Tyr-182, which activates the enzyme.

Phosphorylated upon DNA damage, probably by ATM or ATR.

**細胞内局在** Cytoplasm. Nucleus.

#### 画像



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

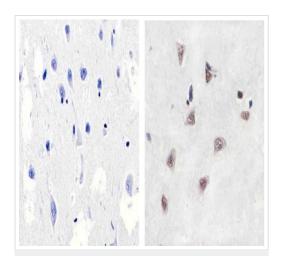
Lysates/proteins at 20 µg per lane.

#### **Secondary**

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

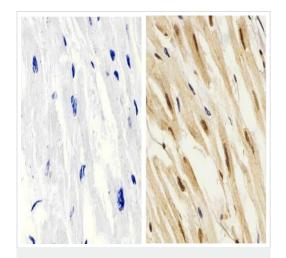
Developed using the ECL technique.

Predicted band size: 38 kDa



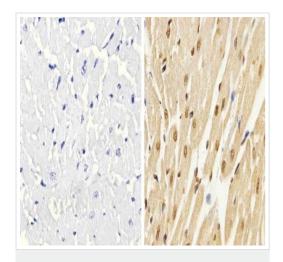
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

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.



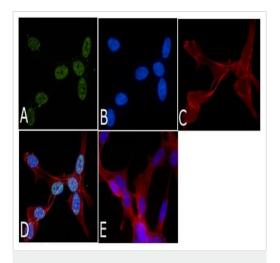
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

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.



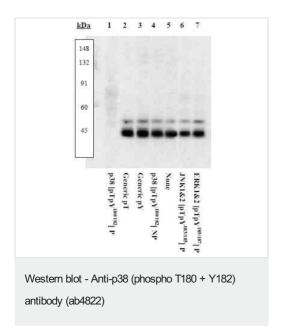
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-p38 (phospho T180 + Y182) antibody (ab4822)

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 - Antip38 (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<sup>®</sup> 488 Goat Anti-Rabbit lgG 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<sup>®</sup> 594 Phalloidin. Panel d is a merged image showing nuclear localization. Panel e is a no primary antibody control.



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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