

Jnk/SAPK (phospho-Thr183/Tyr185) Monoclonal Antibody (9H8)

Product Specifications

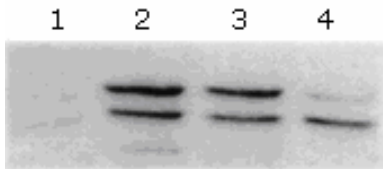
Catalog Number:	905-662
Host:	Mouse
Isotype:	IgG ₁
Species Reactivity:	Human and mouse
Predicted m.w.:	~46 and 54 kDa
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB: 0.5 µg/mL (ECL) <i>Recommended blocking buffer CPPT: 0.5% (w/v) casein, 1% (w/v) PEG 4000, 1% (w/v) PVP, 0.1% (v/v) Tween 20, 2x PBS</i> IP: 1-10 µg per 10 ⁶ vanadate-treated A431 cells ELISA: 0.05 µg/mL
Concentration:	See product label
Purification:	Thiophilic adsorption and size exclusion chromatography
Format:	Lyophilized from 2x PBS, 0.1% sodium azide, PEG, and sucrose; reconstitute with 1 mL of water for 15 min at RT
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C; store at -80°C after reconstitution (aliquot to avoid repeated freeze/thaw cycles)
Immunogen:	Synthetic phospho-peptide derived from sequence of human Jnk/SAPK, conjugated to KLH
Related Products:	
900-106	Jnk1/2 (phospho) EIA Kit
KAP-SA011	Jnk1/2 (SAPK) (phospho-Thr183/Tyr185) Polyclonal Antibody
905-649	Jnk1 Monoclonal Antibody
905-648	Jnk2 Monoclonal Antibody
905-650	Jnk3 Monoclonal Antibody

Background:

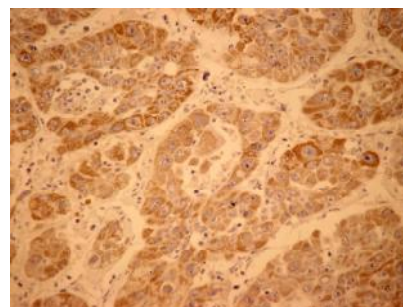
Stress-activated protein kinases/c-Jun N-terminal kinases (SAPK/Jnk) are strongly activated in response to adverse stimuli such as heat and osmotic shock, DNA-damage, inhibitors of protein synthesis, and inflammatory cytokines¹⁻². The Jnk gene family consists of three members subject to alternative splicing which results in the production of at least ten different isoforms. Jnk1 and Jnk2 expression occurs ubiquitously, while Jnk3 expression occurs most strongly in the heart, brain, and testes¹⁻². Jnk proteins include a conserved Thr-Pro-Tyr activation motif in the catalytic domain which, when activated, relays Jnk signaling by phosphorylation of such downstream substrates as transcription factors c-Jun and ATF-2 in the nucleus, and cytoplasmic targets Bcl-2 and tau³. The antibody also recognizes the dually phosphorylated site (pThr-Gly/Pro-pTyr), but does not interact with the non-phosphorylated form of the protein. Jnk/SAPK (phospho-Thr183/Tyr185) Monoclonal Antibody (9H8) shows no cross-reactivity with activated MAP Kinases 1 or 2.

References:

1. Kyriakis, J.M., *et al.* (2001) *Physiol Rev.* 81, 807-869.
2. Widmann, C., *et al.* (1999) *Physiol Rev.* 79, 143-180.
3. Waetzig, V., *et al.* (2003) *J Biol Chem.* 278, 567-572.



Western blot analysis of unstimulated (1), sorbitol treated (2), arsenite treated (3), or pervanadate treated (4) serum-free Jurkat cell lysates, probed with Jnk/SAPK (phospho-Thr183/Tyr185) Monoclonal Antibody (9H8).



Immunohistochemical staining of human hepatoma tissue with Jnk/SAPK (phospho-Thr183/Tyr185) Monoclonal Antibody (9H8).

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