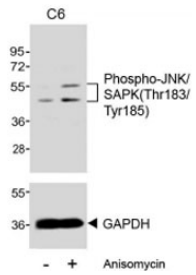
phospho-JNK/SAPK Antibody (pThr183/Tyr185) (F53948)

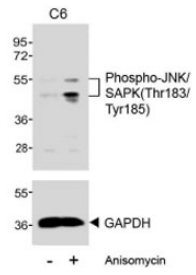
Catalog No.	Formulation	Size
F53948-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F53948-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Rat
Predicted Reactivity	Chicken, Mouse
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P45984
Applications	Western Blot : 1:250-500
Limitations	This phospho-JNK/SAPK antibody is available for research use only.



Western blot testing of extracts from C6 cells, untreated or treated with anisomycin (25 ug/ml), with phospho-JNK/SAPK antibody at 1:500 (upper) or GAPDH Ab (lower).



Western blot testing of extracts from C6 cells, untreated or treated with anisomycin (25 ug/ml), with phospho-JNK/SAPK antibody 1:500 (upper) or GAPDH Ab (lower).

Description

Serine/threonine-protein kinase involved in various processes such as cell proliferation, differentiation, migration, transformation and programmed cell death. Extracellular stimuli such as proinflammatory cytokines or physical stress stimulate the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. In this cascade, two dual specificity kinases MAP2K4/MKK4 and MAP2K7/MKK7 phosphorylate and activate MAPK9/JNK2. In turn, MAPK9/JNK2 phosphorylates a number of transcription factors, primarily components of AP-1 such as JUN and ATF2 and thus regulates AP-1 transcriptional activity. In response to oxidative or ribotoxic stresses, inhibits rRNA synthesis by phosphorylating and inactivating the RNA polymerase 1-specific transcription initiation factor RRN3. Promotes stressed cell apoptosis by phosphorylating key regulatory factors including TP53 and YAP1. In T-cells, MAPK8 and MAPK9 are required for polarized differentiation of T-helper cells into Th1 cells. Upon T-cell receptor (TCR) stimulation, is activated by CARMA1, BCL10, MAP2K7 and MAP3K7/TAK1 to regulate JUN protein levels. Plays an important role in the osmotic stress-induced epithelial tight-junctions disruption. When activated, promotes beta-catenin/CTNNB1 degradation and inhibits the canonical Wnt signaling pathway. Participates also in neurite growth in spiral ganglion neurons. Phosphorylates the CLOCK-ARNTL/BMAL1 heterodimer and plays a role in the regulation of the circadian clock.

Application Notes

Titration of the phospho-JNK/SAPK antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence surrounding pThr183 and pTyr185 from the human protein was used as the immunogen for the phospho-JNK/SAPK antibody.

Storage

Aliquot the phospho-JNK/SAPK antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.