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# SAPK4 (h): 293 Lysate: sc-173414

## BACKGROUND

Lipopolysaccharide has been shown to induce tyrosine phosphorylation of a unique protein, designated p38. p38 is a member of the MAP kinase family with features most closely resembling those of the *Saccharomyces cerevisiae* protein Hog1. p38 and Hog1 share a TGY phosphorylation sequence, whereas most other MAP kinase family proteins have a TEY sequence. A related protein, p38 $\beta$ , has been shown to phosphorylate ATF-2 at a 20-fold higher rate than p38, suggesting distinct substrate preferences. Stress activated protein kinase-4, or SAPK4, also designated p38 $\delta$ , is a related protein that is phosphorylated by MKK6 in response to cytokines and cellular stresses.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: MAPK13 (human) mapping to 6p21.31.

## PRODUCT

SAPK4 (h): 293 Lysate represents a lysate of human SAPK4 transfected 293 cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

SAPK4 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive SAPK4 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

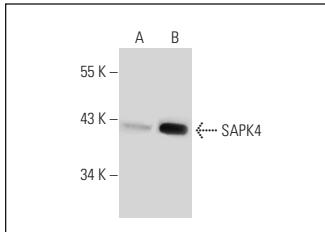
SAPK4 (E-7): sc-46678 is recommended as a positive control antibody for Western Blot analysis of enhanced human SAPK4 expression in SAPK4 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

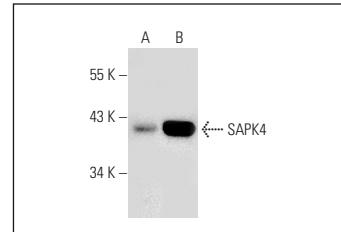
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



SAPK4 (E-7): sc-46678. Western blot analysis of SAPK4 expression in non-transfected: sc-110760 (**A**) and human SAPK4 transfected: sc-173414 (**B**) 293 whole cell lysates.



SAPK4 (20): sc-136063. Western blot analysis of SAPK4 expression in non-transfected: sc-110760 (**A**) and human SAPK4 transfected: sc-173414 (**B**) 293 whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.