



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

p38 α (m): 293T Lysate: sc-122319

BACKGROUND

MAP (mitogen-activated protein) kinases play a significant role in many biological processes, including cell adhesion and spreading, cell differentiation and apoptosis. p38 α , p38 β and p38 γ , also known as MAPK14, MAPK11 and MAPK12, respectively, each contain one protein kinase domain and belong to the MAP kinase family. Expressed in different areas throughout the body with common expression patterns in heart, p38 proteins use magnesium as a cofactor to catalyze the ATP-dependent phosphorylation of target proteins. Via their catalytic activity, p38 α , p38 β and p38 γ are involved in a variety of events throughout the cell, including signal transduction pathways, cytokine production and cell proliferation and differentiation. The p38 proteins are subject to phosphorylation on Thr and Tyr residues, an event which is thought to activate the phosphorylated protein.

REFERENCES

- Lee, J.C., Laydon, J.T., McDonnell, P.C., Gallagher, T.F., Kumar, S., Green, D., McNulty, D., Blumenthal, M.J., Heys, J.R. and Landvatter, S.W. 1994. A protein kinase involved in the regulation of inflammatory cytokine biosynthesis. *Nature* 372: 739-746.
- Han, J., Richter, B., Li, Z., Kravchenko, V. and Ulevitch, R.J. 1995. Molecular cloning of human p38 MAP kinase. *Biochim. Biophys. Acta* 1265: 224-227.
- Li, Z., Jiang, Y., Ulevitch, R.J. and Han, J. 1996. The primary structure of p38 γ : a new member of p38 group of MAP kinases. *Biochem. Biophys. Res. Commun.* 228: 334-340.
- Jiang, Y., Chen, C., Li, Z., Guo, W., Gegner, J.A., Lin, S. and Han, J. 1996. Characterization of the structure and function of a new mitogen-activated protein kinase (p38 β). *J. Biol. Chem.* 271: 17920-17926.
- Tamura, K., Sudo, T., Senftleben, U., Dadak, A.M., Johnson, R. and Karin, M. 2000. Requirement for p38 α in erythropoietin expression: a role for stress kinases in erythropoiesis. *Cell* 102: 221-231.
- Sudo, T., Yagasaki, Y., Hama, H., Watanabe, N. and Osada, H. 2002. Exip, a new alternative splicing variant of p38 α , can induce an earlier onset of apoptosis in HeLa cells. *Biochem. Biophys. Res. Commun.* 291: 838-843.
- Court, N.W., dos Remedios, C.G., Cordell, J. and Bogoyevitch, M.A. 2002. Cardiac expression and subcellular localization of the p38 mitogen-activated protein kinase member, stress-activated protein kinase-3 (SAPK3). *J. Mol. Cell. Cardiol.* 34: 413-426.
- Diskin, R., Askari, N., Capone, R., Engelberg, D. and Livnah, O. 2004. Active mutants of the human p38 α mitogen-activated protein kinase. *J. Biol. Chem.* 279: 47040-47049.
- Zohn, I.E., Li, Y., Skolnik, E.Y., Anderson, K.V., Han, J. and Niswander, L. 2006. p38 and a p38-interacting protein are critical for downregulation of E-cadherin during mouse gastrulation. *Cell* 125: 957-969.

CHROMOSOMAL LOCATION

Genetic locus: Mapk14 (mouse) mapping to 17 A3.3.

RESEARCH USE

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

PRODUCT

p38 α (m): 293T Lysate represents a lysate of mouse p38 α transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

p38 α (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive p38 α antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.