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

SANTA CRUZ BIOTECHNOLOGY, INC.

Angiotensin I/II (h3): 293 Lysate: sc-158268

BACKGROUND

Angiotensin is formed from a precursor, angiotensinogen, which is produced by the liver and found in the α-globulin fraction of plasma. The lowering of blood pressure is a stimulus to secretion of Renin by the kidney into the blood. Renin cleaves, from angiotensinogen, a terminal decapeptide, Angiotensin I (Ang I). This is further altered by the Angiotensin-converting enzyme (ACE) that enzymatically removes a dipeptide to form Angiotensin II (Ang II). Angiotensin II, an octapeptide hormone, is an important physiological effector of blood pressure and volume regulation through vasoconstriction, aldosterone release, sodium uptake and thirst stimulation. It has been shown that mechanical stress causes release of Angiotensin II from cardiac myocytes and that Angiotensin II acts as an initial mediator of the hypertrophic response. Angiotensin II treatment also stimulates phosphorylation of Shc, FAK and MAP kinases and induces MKP-1, indicating stimulation of growth factor pathways.

REFERENCES

1. Tsuda, T., et al. 1991. Vasoconstrictor-induced protein-tyrosine phosphorylation in cultured vascular smooth muscle cells. FEBS Lett. 285: 44-48.
2. Sadoshima, J., et al. 1993. Autocrine release of Angiotensin II mediates stretch-induced hypertrophy of cardiac myocytes *in vitro*. Cell 75: 977-984.
3. Duff, J.L., et al. 1993. Angiotensin II induces 3CH134, a protein-tyrosine phosphatase, in vascular smooth muscle cells. J. Biol. Chem. 268: 26037-26040.
4. Schorb, W., et al. 1994. Angiotensin II-induced protein tyrosine phosphorylation in neonatal rat cardiac fibroblasts. J. Biol. Chem. 269: 19626-19632.
5. Marrero, M.B., et al. 1995. Direct stimulation of JAK/Stat pathway by the Angiotensin II AT1 receptor. Nature 375: 247-250.
6. Hong, H.J., et al. 2004. Angiotensin II induces endothelin-1 gene expression via extracellular signal-regulated kinase pathway in rat aortic smooth muscle cells. Cardiovasc. Res. 61: 159-168.
7. Gao, B.B., et al. 2006. Angiotensin II stimulates phosphorylation of an ectodomain-truncated platelet-derived growth factor receptor β and its binding to class IA PI 3-K in vascular smooth muscle cells. Biochem. J. 397: 337-344.
8. Yayama, K., et al. 2008. Angiotensin II-induced vasodilation via type 2 receptor: role of Bradykinin and nitric oxide. Int. Immunopharmacol. 8: 312-318.

CHROMOSOMAL LOCATION

Genetic locus: AGT (human) mapping to 1q42.2.

PRODUCT

Angiotensin I/II (h3): 293 Lysate represents a lysate of human Angiotensin I/II transfected 293 cells and is provided as 100 µg protein in 200 µl 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

Angiotensin I/II (h3): 293 Lysate is suitable as a Western Blotting positive control for human reactive Angiotensin I/II antibodies. Recommended use: 10-20 µl per lane.

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

RESEARCH USE

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

PROTOCOLS

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