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Angiotensin II Protein
A Ligand of AT1, AT2, AT3 and AT4 G-Protein Coupled Receptors
Catalog # PG10010

Specification

Angiotensin II Protein - Product Information

Angiotensin II Protein - Additional Information

Storage
-20°C

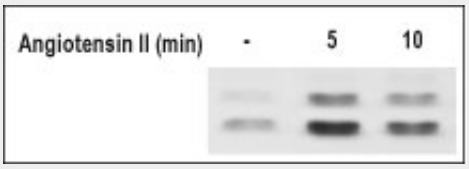
Precautions
Angiotensin II Protein is for research use only and not for use in diagnostic or therapeutic procedures.

Angiotensin II Protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Angiotensin II Protein - Images



Angiotensin_II - Abgent Angiotensin II induces MAPK activation in IEC-6 cells.Cells were incubated in serum depleted medium for 2 h and then stimulated with 100 nM Angiotensin II (#PG10010) for 5 or 10 min. Cell proteins were resolved by SDS-PAGE and probed with anti-phospo-ERK1/2.

Angiotensin II Protein - Background

Angiotensin II (Ang II) is a key factor in the Renin-Angiotensin-Aldosterone (RAAS) system. Ang II is a derivative of a precursor molecule – angiotensinogen, a member of the serpin family. Angiotensinogen is a substrate of the Renin in the kidney to produce a deca peptide – Ang I, which appears to have no biological activity. Ang I is converted to Ang II by Angiotensin-Converting Enzyme (ACE)1,2.The biological effects caused by Ang II are mediated by four Ang II receptor

subtypes: AT1, AT2, AT3, and AT4. Ang II plays a critical role in the regulation of the renal and cardiovascular systems, and some activities in the central nervous systems. Circulating levels of Ang II were identified as controlling blood pressure, based on the regulation of salt and water metabolism, vascular smooth muscle cell tone, thirst, and sympathetic system outflow. Ang II is well known to cause potent increases in systemic and local blood pressure via its vasoconstrictive effect, to influence renal tubules, to retain Na+and water by activating Na+/H+ exchangers, and by stimulating aldosterone release from the adrenal gland3.Ang II is also a cell growth modulator depending on the Ang II receptor subtype expressed in the cell membrane. It may either stimulate growth (proliferation, hypertrophy) or act as a growth suppressor3,4.

Angiotensin II Protein - References

1 . Basso, N. and Terragno, N.A. (2001) Hypertension38, 1246.2 . Santos, R.A. et al.(2003)Proc. Natl. Acad. Sci. U. S. A.100, 8258.3 . Kim, S. and Iwao, H. (2000) Pharmacol. Rev.52, 11.4 . Dinh, D.T. et al.(2001)Clinical Science100, 481.