

ADVANCE ABSTRACTS

5th Acta Endocrinologica Congress

Acta Endocrinologica
Supplementum 100 (1965)

Fifth Acta Endocrinologica Congress
Hamburg, 3rd-7th August 1965

**ADVANCE ABSTRACTS
OF LECTURES
AND SHORT PAPERS**

Printed in Germany
Printed by Lütcke & Wulff, Hamburg

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EFFECT OF ADRENOCORTICOTROPIN OR ADENOSIN-3',5'-MONOPHOSPHATE ON IN VITRO ADRENAL PROTEIN SYNTHESIS

Peter C. Scriba

II. Medizinische Klinik der Universität München (Dir. Prof. Dr. Dr. G. Bodechtel)

Enhancement of in vitro amino acid incorporation into adrenal protein has been shown both in a cell free system after in vivo treatment of rats with ACTH (*Farese, R. V., and Reddy, W. J., Endocrinology 73, [1963] 294*) and by in vitro addition of ACTH to quartered adrenals (*Bransome, E. D., Jr. and Reddy, W. J., Arch. Biochem. Biophys. 101, [1963] 21*). For amino acid incorporation in a cell free adrenal system a non-dialysable factor of the 105 000 x g supernatant was shown to be rate-limiting and to be increased in activity or amount following in vivo ACTH-treatment. Evidence suggested that this factor was transfer enzyme (*Scriba, P. C., and Reddy, W. J., Endocrinology, April 1965*), whereas no stimulatory effect of any cytoplasmic ribonucleic acid could be demonstrated. ACTH or adenosin-3',5'-monophosphate stimulate in vitro adrenal corticoid production (*Koritz, S. B., Biochem. Biophys. Acta 60, [1962] 179*). Experiments on the in vitro effect of cyclic adenosin-3',5'-monophosphate on adrenal protein synthesis are to be reported.