CAMP cyclic adenosine mono phosphate

General:

Cyclic adenosine monophosphate (cyclic AMP, cAMP, 3',5'-cAMP), a cyclic nucleotide, adenosine 3',5'-cyclic monophosphate, is involved in the action of many hormones, including catecholamines, ACTH and vasopressin. The hormone (first message) binds to a specific β-receptor on the cell membrane of target cells. This activates an enzyme, adenylate cyclase, which produces cyclic AMP from ATP. Cyclic AMP acts as a second messenger activating other enzymes via covalent modulation within the cell. It is also used to regulate the passage of Ca^{2+} through ion channels.

The elimination of cyclic AMP (generated from plasma and kidneys) is considered as total cyclic AMP. The quantity of renal AMP depends on the num-ber of tubuli as well as on parathyroid hormone concentration. High concen-trations of parathyroid hormone stimulate the adenylate cyclase in the renal cortex, which leads to an increased production of cAMP. Secretion of total cyclic AMP is adjusted to creatinine clearance (determination of the creatinine in urine and serum).

Indication:	DD pseudo-hypoparathyroidism, prim. or sec. hyperparathyroidism.
Material:	10 ml urine
TAT:	7-10 days*
Method:	RIP
Units:	µmol/l
Ref.- range:	see report

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit
http://www.fml-dubai.com/parameter-listings/

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