

PNH 病人血浆中 AchE 含量的测定

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摘要 用 ELISA 方法测定阵发性睡眠性血红蛋白尿症 (PNH) 病人血浆和红细胞膜中乙酰胆碱酯酶 (AchE) 的含量, 结果显示 PNH 病人红细胞膜中的 AchE 低于正常, 而血浆中的 AchE 高于正常。

关键词 阵发性睡眠性血红蛋白尿症 (PNH), 可溶性乙酰胆碱酯酶, 血浆, 红细胞膜

阵发性睡眠性血红蛋白尿症 (PNH) 是后天性膜缺陷溶血病, 最近文献报道^[1,2], PNH 病人红细胞缺乏一种糖肌醇磷脂结合蛋白 (GPI-Pr), 这一类蛋白约有几十种, 乙酰胆碱酯酶 (AchE) 是其中之一, 存在于红细胞膜表面, 我们实验室也证实 PNH 病人红细胞膜缺乏 AchE^[3]。

近五年的研究发现膜酶存在有两种类型, 可溶性及膜结合型^[4], PNH 病人红细胞膜上缺乏 AchE, 推测可能是 AchE 从膜上水解释放到血浆中, 形成可溶性 AchE; 或者合成过程有缺陷, 合成的蛋白不能与糖肌醇磷脂结合, 从而不能形成膜结合型 AchE。所以我们应用 ELISA 方法直接测定了 PNH 病人红细胞膜上及血浆中 AchE 含量, 结果发现 PNH 病人红细胞膜内 AchE 的含量 (0.33 ± 0.25

$A/mgPr.$) ($n=9$) 远比正常人 ($0.63 \pm 0.3 A/mg Pr.$) ($n=16$) 低 ($P<0.05$); 而血浆中 AchE 的含量 ($0.012 \pm 0.02 A/mg Pr.$) ($n=9$) 远比正常人 ($0.0009 \pm 0.001 A/mg Pr.$) ($n=25$) 高 ($P<0.01$)。

AchE 存在有两种类型还未见文献报道, 至于 PNH 病人出现这种现象的机制我们正在继续研究。

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yield. At the same time, AC, a by-product which was not contaminated by G_s , can be used for assay of G_s activity after reconstituting it into asolectin vesicles. This method of assaying G_s activity has been proved to be simple, reliable and sensitive.

Key words stimulatory GTP-binding protein, adenylate cyclase, bovine brain

FOS/JUN Mediates Endothelin-1 Gene Expression Induced by Phorbol Ester in Endothelial Cells. Wen Jinkun, Hu Jing, Qiao Yaming, Zhang Chenhui, Zhou Airu, Tang Jian. (*Institute of Basic Medicine, Hebei Medical College, Shijiazhuang 050017*). *Prog. Biochem. Biophys. (China)*. 1994; **21** (5): 457—458

Gel shift of electrophoresis and Northern and Western blotting analysis were used to detect the effect of c-jun antibody on the interaction between AP-1 site of ET-1 gene and nuclear proteins as well as the effect of TPA on c-fos/c-jun gene expression. The results showed that AP-1 binding activity in vascular endothelial cells was stimulated by c-fos/c-jun, whose expression was induced by TPA, and that the electrophoretic mobility of band of DNA-protein complexes was altered by the antibody against c-jun. These results suggest that ET-1 gene expression induced by TPA is mediated by c-fos/c-jun.

Key words ET-1 gene, endothelial cells, c-fos/c-jun, TPA

A Rapid and Reliable Method for Direct Sequencing of PCR Products. Wang Liang, Zhang Jinsan, Zhu Dan, Yin Luo, Wang Xiuqin, Wu Min. (*National Laboratory of Molecular Oncology, Cancer Institute, Chinese Academy of Medical Sciences and Peking Union Medical*

College, Beijing 100021). *Prog. Biochem. Biophys. (China)*. 1994; **21** (5): 458—459

A simple, rapid and reliable sequencing method for double stranded PCR products is described. This method presented utilizing the unique property of T7 DNA polymerase which remains active at low temperature to allow the sequencing reaction performed at low temperature. Excellent sequencing results have been obtained by this method for various PCR products.

Key words polymerase chain reaction (PCR), DNA sequencing, T7 DNA polymerase

Determination of the Content of AchE in the Plasma of Patients With PNH. Xu Caimin, Lu Hong, Pan Huazhen, Zhang Zhinan. (*National Laboratory of Medical Molecular Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences, Beijing 100005*). *Prog. Biochem. Biophys. (China)*. 1994; **21** (5): 460

The contents of AchE in plasma and erythrocyte membrane of patients with PNH were determined by ELISA. The results show that the content of AchE is low in PNH erythrocyte membrane but high in plasma when it is compared with that in normal.

Key words paroxysmal nocturnal hemoglobinuria (PNH), soluble acetylcholinesterase (soluble AchE), plasma, erythrocyte membrane

Computer Design of Murine Adenosine Deaminase mRNA Specific Ribozyme. Chen Hua, Chen Nongan, Lu Changde, Qi Guorong. (*Shanghai Institute of Biochemistry, Academia Sinica, Shanghai 200031*). *Prog. Biochem. Biophys. (China)*. 1994; **21** (5): 461—463

With computer analysis of the adenosine