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论著

HaCaT细胞蛋白质组双向电泳图谱的建立

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摘要 背景与目的： 建立HaCaT细胞蛋白质组双向电泳图谱。 材料与方法： 用含10％ 胎牛血清的RPMI1640培养液培养HaCaT细胞，胰酶消化后收集细胞，加入细胞裂解液使细胞充分裂解，离心后取上清液进行第一向第电聚焦电泳和平衡，再进行第二向十二烷基硫酸钠-聚丙烯酰胺凝胶电泳和考马斯亮蓝染色及图像扫描与分析。 结果： 通过对HaCaT细胞蛋白提取液进行双向电泳，在 17 cm pH 3-10 L IPG胶条上可分离到(700±23)个重复性及分辨率均较好的蛋白位点，蛋白斑点的匹配率为72.2％。 结论： HaCaT细胞蛋白质组双向电泳图谱的建立，为其蛋白质组学的进一步研究奠定了基础。

关键词 双向电泳； HaCaT细胞； 蛋白质组

Development of Two-dimensional Gel Electrophoresis Profiles of Proteome from HaCaT Cells

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Abstract BACKGROUND & AIM: To develope the two-dimensional gel electrophoresis (2-DE) profiles in the proteome research of HaCaT cell line. MATERIAL AND METHODS: HaCaT cells were cultured in RPMI1640 culture medium containing 10％ fetal bovine serum, then harvested after digestion by trypsin, and lysed in lysis buffer. After centrifugation, supernatant was separated by isoelectric focusing (IEF), equilibrated and run on SDS polyacrylamide gel electrophoresis (SDS-PAGE), stained by Coomassie Brilliant Blue then followed by image scanning and analyzsis. RESULTS: 700±23 protein spots were detected in the 2-DE profiles on 17 cm IPG strip (pH 3-10 L) of HaCaT cell proteome separated by 2-D PAGE. A match rate of 72.2％ of the spots between gels was obtained. CONCLUSION: The 2-DE profiles of proteome from HaCaT cells was established and lay foundations for the proteome research HaCaT cells.

Keywords two-dimensional gel electrophoresis HaCaT cell line proteome

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