URN etd-0407109-183718-1480
Author Yun-Chin Yao
Author's Email Address No Public.
Statistics This thesis had been viewed 50 times. Download 74 times.
Department
Year 2004
Semester 1
Degree Master
Type of Document Master's Thesis
Language zh-TW.Big5 Chinese
Title Search for the tumor-related proteins of transition cell carcinoma in Taiwan by proteomic analysis
Date of Defense 0000-00-00
Page Count 60

Keyword
TCC
Proteomics
annexin I

Abstract
Bladder cancer is one of the most prevalent cancers in urinary tract in Taiwan. To better understand the carcinogenesis of bladder, we utilized proteomic approach to establish the protein map and search for potential biomarkers of transitional cell carcinoma (TCC), the major type of bladder cancer. Analysis by two-dimensional (2-D) gel electrophoresis and tandem mass spectrometry showed that seven proteins were down-regulated and three proteins were up-regulated in Grade III samples as compared with those of Grade II. Of these down-regulated proteins, fatty acid binding proteins, annexin V, heat shock protein 27, and lactate dehydrogenase have been shown to be associated with bladder cancer. Our studies also found altered expression of a group of proteins that have not been documented previously in bladder cancer, including annexin I, galectin-1, lysophospholipase and mitochondrial short-chain enoyl-coenzyme A hydratase 1 precursor. These results illustrated a pattern of differential protein expression between low and high Grade tumors and it may be utilized as the molecular fingerprinting of a subset of bladder cancers. In addition, this study provides a valuable foundation to study pathological mechanisms in cancers of urothelial origin.
Consistent with the results of 2-D gels, the immunohistochemical staining of grade III TCC with antiserum to annexin I protein demonstrated that the annexin I protein is up-regulated in grade III TCC.
Advisory Committee Ting-Feng Wu - advisor

Files etd-0407109-183718-1480-001.pdf

indicate access worldwide
Date of Submission 2005-08-23