E111 Screening of the differentially expressed proteins and A.P endonuclease in human gynecological tumors

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We investigated the clinical significance of changes in protein expression by SDS-polyacrylamide gel electrophoresis (SDS-PAGE) and western blotting method in 1 case of endometrial cancer, 2 cases of cervical cancer, 1 case of ovarian cancer, 2 cases of benign ovarian tumor, 2 cases of borderline ovarian tumor and 1 case of ovarian cancer transferred omentum. The results were follows : 1. In one endometrial cancer, 12 kDa, 25 kDa, 31.5 kDa, 50kDa, 62 kDa and 72 kDa proteins were overexpressed or up-regulated and 34.5 kDa protein was newly expressed. 2. In 2 cervical cancers, 12 kDa, 25 kDa, 31.5 kDa, 50 kDa, 62 kDa and 72 kDa proteins were overexpressed or up-regulated, and 40 kDa protein was down-regulated. 43 kDa protein was overexpressed in one patient. 3. In one ovarian cancer, 24 kDa and 38 kDa proteins were up-regulated. 4. In 2 benign ovarian tumors, 18.8 kDa protein was down-regulated, and almost all band was down-regulated except 14 kDa and 67 kDa proteins, respectively. 5. In 2 borderline ovarian tumors, 32.5 kDa proteins were up-regulated in one patient and 31.5 kDa proteins were down-regulated, respectively. 6. In one ovarian cancer transferred omentum, 72 kDa protein was up-regulated in the patient. 7. A.P endonuclease was also differentially expressed among the gynecological tumors. Under our experimental conditions, the differential display of protein bands produced at least 1 new, 8 up-regulated and 3 down-regulated. The protein patterns were similar between endometrial and cervical cancer, except 34.5 kDa in endometrial and 43 kDa in cervical cancer.

E112 **Cloning and Characterization of a cDNA for 64-kDa Membrane Protein of Rapid Fusing Lysosome in *Amoeba proteus***

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Previously we produced 2 monoclonal antibodies (mAbs), LCA45 for a matrix protein and LYA64 for a membrane protein of lysosomes in Amoeba proteus and showed that amoeba have lysosomes in subpopulations [Mol & Cells 6: 316-324, 1996). Lysosomes staining with LYA64 antibody began to fuse with phagosomes from 10 min of food vacuole formation and maximum fusion occurred in 2 h. In this study, we cloned a cDNA of 1.62 kb by screening a cDNA library of amoeba constructed in λZAP using LYA64 as a probe. The cDNA contained a poly-A tail and encoded a protein of 60 kDa. In a search for homologous gene from databases, the protein was found to be a noble protein showing partial homology to endoprotease of human adenovirus type III. In the deduced polypeptide had a -^{125}AsnSerSer^{128}- as a site for heavy mannose type glycosylation and 5 hydrophobic domains as potential transmembrane sections. The predicted antigenic determinant was ^{57}DRKSQDH^{63}.