

Thesis Title Isolation of Purified Ovarian Cancer Antigens
 Verifying Specific Activity with Established
 Monoclonal Antibodies.

Name Leatchai Wachirutmanggur

Degree Master of Science (Biochemistry)

Thesis Supervisory Committee

 Neelobol Neungton, M.D.

 Primchanien Moongkarndi, Dr. rer. nat

Date of Graduation 4 May B.E. 2535 (1992)

ABSTRACT

OVS1-Antigen (OVS1-Ag), a tumor associated antigen recognized by newly established OVS1 monoclonal antibody (OVS1 MAb), was extracted from fresh surgical mucinous cystadenocarcinoma of human ovary by sonication or 0.5% triton x-100 in PBS. Subsequently the crude extract was purified by three affinity chromatographies, concanavalin A sepharose 4B, antinormal human serum and antinormal human ovary coupled to cyanogen bromide activated sepharose 4B. The characterization of OVS1-Ag by SDS-PAGE and Western blot demonstrated specific reactivity of the OVS1 MAb with the 29 kD glycoprotein. The data from ELISA showed the specific reaction between purified OVS1-Ag and OVS1 MAb but no reaction with antigens from normal ovarian extract or normal serum. Also no cross reaction between OVS1-Ag and other unrelated MABs was confirmed. The clinical significance of OVS1-Ag as a new tumor marker requires further study.