

KOT

## DETECTION OF CANCER WITH THE HUMORAL LEUKOCYTE ADHERENCE INHIBITION ASSAY

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Recently a new test has been developed based on detection of an anti-tumour immune factor present in the serum of cancer patients. In this humoral leukocyte adherence inhibition (H-LAI) test, serum from the person under study is mixed with the relevant antigen, incubated with trypsinized leukocytes from healthy blood donors and the reduction in adherence in these leukocytes to a glass surface is subsequently measured. With the H-LAI test, positive responses have been obtained in 70-90% of patients with breast and lung cancers.

In a small retrospective study, using serum from persons who later have developed lung cancer, positive responses were found 1-5 years prior to the diagnosis of the disease.

The serum factor responsible for the observed reaction is a glycoprotein. Mechanistic studies indicate the T8-subpopulation of the T-lymphocytes to be essential in the H-LAI reaction.

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KOV

## DEVELOPMENT, CHARACTERIZATION AND CLINICAL APPLICATIONS OF A NEW ANTI-KERATIN MONOCLONAL ANTIBODY.

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Mouse monoclonal antibodies have been raised against a membrane preparation of liver metastases from human breast cancer. One of them M-08 recognizes intermediate filaments of the cytokeratine type as confirmed by immunofluorescence studies on 30 cultured cell lines and by filamentous network disrupting drug experiments. In immunoblots, M-08 exhibited restricted binding to low molecular weight proteins. No reactivity was found on tissues and several other species. Our results on a series of frozen and paraffin-embedded sections of either normal or tumour origin indicated that the antibody stains selectively epithelial structures, predominantly simple epithelia. It does not react with stratified squamous epithelium, with nerve, muscle and mesenchymal tissues. In tumours, the majority of adenocarcinomas were found positive. The usefulness of M-08 in improved immunohistochemical and immunocytochemical methods of diagnosis, and in studies of biological behaviour of human tumours has been evaluated.

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KÖV

## HUMORAL LEUKOCYTE ADHERENCE INHIBITION (H-LAI) FOR THE DIAGNOSIS OF HEAD AND NECK CANCER WITH MYELIN BASIC PROTEIN ANTIGEN.

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85 patients were examined using a tube modification of the humoral leukocyte adherence inhibition assay. These included 58 with cancer in the head and neck region and 27 controls with different benign and non-malignant diseases.

Myelin basic protein (MBP) was used as a "so-called" common carcinoma antigen.

54/58 cancer patients (93.1%) gave positive reactions and only 4/58 (6.9%) were negative. There was no false-positive reactions in the control groups. There was a statistically positive correlation between the %H-LAI and the tumour stages (correlation coefficient: 0.84). However, we have not found such a correlation in individual cases.

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