

## Microfluidic Chip for Immuno-Diagnosis

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We prepared microfluidic channel with anodic aluminum oxide (AAO) for the detection of disease proteins from the bio-fluids such as human serum. Anodic aluminum oxide which have large pore is appropriate material in immunodiagnosics, because it have much larger surface as a sensing area than normal activated slide glass. Wide surface area reinforces the intensity of fluorescence or visible signal at low target concentration. For the demonstration of immuno-diagnosis, we have selected ELISA method which is most prevalent and well established technique using immune system. Labeled primary antibodies are allocated at the entry region for the reaction with biological sample, and secondary antibodies are immobilized on AAO substrate. The acquisition and processing of the signal was accomplished by fluorescence microscope system.