SPR Imaging and AFM Analysis of Protein G and IgG Interactions

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Abstract

The SPR imaging system has been developed to detect protein-protein interactions in an array format on the surface of two-dimensional gold thin film [1]. The major advantage of the technique is to detect molecular interactions in a high-throughput mode without the use of labels. The immobilization of immunoglobulin G (IgG) on a solid substrate is very important in developing biosensor and biochip [2]. Protein G has a high affinity for the C_H2 and C_H3 domains of IgG-Fc [3]. In this study, the binding characteristics of IgG and protein G were investigated using SPR and SPR Imaging. We also investigated the nanoscopic interaction IgG and protein G with atomic force microscope (AFM).

References

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