

Abstract

Provided is a method to detect a target molecule, including a complex formation step of reacting a target molecule, a carrier modified with a first antibody which specifically binds to the target molecule, and two or more second antibodies which specifically bind to the target molecule, are labeled with enzymes having a substrate cleaving activity and mutually different substrate specificities, to form a complex consisting of the first antibody, the target molecule and the second antibodies, on the carrier; and a detection step of reacting two or more substrates having cleavage sites by the enzymes, a fluorescent substance bound to one terminal side of each of the cleavage sites and a quencher bound to another terminal side thereof, wherein the fluorescent substances are mutually different in fluorescence wavelength, and the complex, to detect fluorescence emitted from the fluorescent substances. A signal from a target molecule can be detected with high sensitivity and high accuracy while eliminating noise derived from a detection antibody nonspecifically adsorbed to a carrier.