METHOD FOR DETECTING SUBSTANCE IN BIOLOGICAL SAMPLE

ABSTRACT

The present invention provides a method for detecting a substance in a biological sample, a carrier for using in the method, and a kit. The method of the present invention according to an embodiment includes:

1) providing a carrier on which biotin is bound and providing a fusion protein between a protein that specifically binds to a substance to be detected and a biotin-binding protein;

2) binding the fusion protein to the carrier provided in step 1) through binding between biotin and the biotin-binding protein to produce a fusion protein-bound carrier;

3) mixing

(a) a biological sample, and

(b-i) a cell homogenate extract prepared from cells of the same species as the host cells used for expressing the fusion protein in step 1), and a biotin-binding protein, or

(b-ii) a cell homogenate extract prepared from cells of the same species as the host cells used for expressing the fusion protein in step 1), and genetically engineered to express a biotin-binding protein,

and adding the mixture to the fusion protein-bound carrier produced in step 2); and

4) detecting a substance that has bound to the protein that specifically binds to a substance to be detected in the fusion protein.

Figure 1.