5283079

PROCESS TO MAKE MAGNETICALLY RESPONSIVE FLUORESCENT POLYMER PARTICLES

Chao-Huei J Wang, Dinesh O Shah assigned to Baxter Diagnostics Inc

This invention provides a novel process of producing magnetically responsive fluorescent polymer particles comprising polymeric core particles coated evenly with a layer of polymer containing magnetically responsive metal oxide. A wide variety of polymeric particles with sizes ranging from 1 to 100 microns can be used a core particles and transformed into magnetically responsive polymer particles. The surface of these magnetically responsive polymer particles can be coated further with another layer of functionalized polymer. These magnetically responsive fluorescent polymer particles can be used for passive or covalent coupling of biological material such as antigens, antibodies, enzymes or DNA/RNA hybridization and used as solid phase for various types of immunoassays, DNA/RNA hybridization probes assays, affinity purification, cell separation and other medical, diagnostic, and industrial applications.

5283171

COMPOSITIONS FOR AND DETECTION OF HUMAN PAPILLOMAVIRUS BY SPECIFIC OLIGONUCLEOTIDE POLYMERASE PRIMERS USING THE POLYMERASE CHAIN REACTION

M Michele Manos, Deann K Wright, Yi Ting, Thomas R Broker, Steven M Wolinsky assigned to Hoffmann-La Roche Inc; The University of Rochester New Yor

PCT No. PCT/US89/03747 Sec. 371 Date Feb. 5, 1991 Sec. 102(e) Date Feb. 5, 1991 PCT Filed Aug. 29, 1989.The presence of human papillomavirus (HPV) in a sample can be detected and the HPV typed by a method that involves the amplification of HPV DNA sequences by the polymerase chain reaction (PCR). The primers used in the method are consensus primers that can be used to amplify a particular region of the genome of any HPV. The presence of HPV in a sample is indicated by the formation of amplified DNA. The HPV is typed by the use of type-specific DNA probes specific for the amplified region of DNA.

5283173

SYSTEM TO DETECT PROTEIN-PROTEIN INTERACTIONS

Stanley Fields, Ok-Kyu Song assigned to The Research Foundation of State University of New York

Methods are provided for detecting the interaction between a first test protein and a second test protein, in vivo, using reconstitution of the activity of a transcriptional activator. This reconstitution makes use of chimeric genes which express hybrid proteins. Two types of hybrid proteins are prepared. The first hybrid contains the DNA-binding domain of a transcriptional activator fused to the first test protein. The second hybrid protein contains a transcriptional activation domain fused to the second test protein. If the two test proteins are able to interact, they bring into close proximity the two domains of the transcriptional activator. This proximity is sufficient to cause transcription, which can be detected by the activity of a marker gene which contains a binding site for the DNA-binding domain.

5283175

GENUS-SPECIFIC OLIGOMERS OF BORRELIA AND METHODS OF USING SAME

Terry L Weaver, Darla Wise assigned to The Research Foundation of State University of New York

The subject invention provides DNA oligomers complementary to portions of the flagellin gene of Borrelia burgdorferi which can be used to detect the organism, as well as other Borrelia species, in a sample. PCR technology can be used to amplify the portion of the flagellin gene which is then detected using a biotinylated probe provided by the subject invention.