

IMMUNOASSAY ELEMENTS HAVING A SEPARATE
RECEPTOR LAYER

Abstract

A dry immunoassay analytical element, for assaying a ligand is disclosed. The element comprises in (a) a layer containing a labeled ligand, (b) a spreading layer and c) a receptor layer containing a fixed concentration of an immobilized receptor for the labeled ligand and d) a support; wherein the receptor is i) covalently bonded to polymeric beads having a diameter in the range of 0.1 to 5 mm and ii) dispersed in a binder of a crosslinked chill-gelable polymer comprising 30 to 97 weight percent of polymerized N-alkyl-substituted acrylamide monomers, 3 to 25 weight percent polymerized crosslinking monomer having at least two addition polymerizable groups per molecule, and 0 to 60 weight percent of other polymerized hydrophilic monomers.