

Title (en)

ULTRASENSITIVE COMPETITIVE IMMUNOASSAYS USING OPTICAL WAVEGUIDES

Title (de)

HOCHEMPFINDLICHE KOMPETITIVE IMMUNTESTS UNTER VERWENDUNG VON LICHTWELLENLEITERN

Title (fr)

DOSAGES IMMUNOLOGIQUES PAR COMPETITION ULTRASENSIBLES A BASE DE GUIDES D'ONDES OPTIQUES

Publication

**EP 0731916 A1 19960918 (EN)**

Application

**EP 95904226 A 19941201**

Priority

- US 9413935 W 19941201
- US 16049193 A 19931201

Abstract (en)

[origin: WO9515496A1] Sensitivity of a competitive immunoassay optical sensor is increased by selecting a tag or altering the attachment of a tag to an antigen so that the binding of tagged antigen to an antibody is relative to the binding of untagged antigen to the antibody. The indicator material is selected of a suitable size, decreased antibody, or the indicator material is attached to the antigen through a long chain high molecular weight compound, or the indicator material is attached directly to the antigen with a long chain high molecular weight compound attached elsewhere to the antigen. Pretreatment of the antibody/bound tagged antigen to remove unbound antigen, and optical isolation of the substrate also increase sensitivity. If the tag cannot be attached to the antigen, it is attached to the antibody. The tag is selected or attached to increase sensitivity to antigen.

IPC 1-7

**G01N 33/53; G01N 33/543; G01N 33/58**

IPC 8 full level

**G01N 33/53** (2006.01); **G01N 33/532** (2006.01); **G01N 33/543** (2006.01)

CPC (source: EP)

**G01N 33/5306** (2013.01); **G01N 33/54393** (2013.01)

Citation (search report)

See references of WO 9515496A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 9515496 A1 19950608**; EP 0731916 A1 19960918; JP H09509480 A 19970922; TW 371714 B 19991011

DOCDB simple family (application)

**US 9413935 W 19941201**; EP 95904226 A 19941201; JP 51580294 A 19941201; TW 83103430 A 19940418