Title (en)

HIGH DENSITY ARRAYS FOR PROTEOME ANALYSIS AND METHODS AND COMPOSITIONS THEREFOR

Title (de)

HOCHDICHTE MATRIZEN ZUR PROTEOMANALYSE UND VERFAHREN UND ZUSAMMENSETZUNGEN DAFÜR

Title (fr)

SERIES HAUTE DENSITE POUR L'ANALYSE DES PROTEOMES ET PROCEDES ET COMPOSITIONS POUR CES DERNIERS

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9939210A1] The present invention provides high-density arrays comprising a primary protein array and a secondary antibody array, wherein the secondary array comprises monoclonal antibodies and/or antibody variants or derivatives that bind specifically or non-specifically to one or more proteins in the primary array, and wherein the secondary array is used to determine the protein profile of a cell, tissue, organ or whole organism or a cellular extract, lysate or protein fraction derived therefrom. Also provided are methods of determining the epitope profile of cells, tissues, organs and whole organisms and cellular extracts, lysates or protein fractions derived therefrom, using the high density protein arrays of the invention, in particular in relation to diagnostic and therapeutic applications. The invention further provides for the enrichment of native proteins from complex mixtures of cellular proteins by employing one or more antibodies uniquely recognising an antigen of interest as defined by recognition patterns obtained when screening secondary antibody arrays against primary antigen arrays. In addition, one or more antibodies can be employed to produce a unique tag for target antigens and is employed to follow the expression levels of complex mixtures of cellular proteins and is conducted independently of the separation sciences. A similar approach is employed to produce a fingerprint of a biological sample, based upon recognition of a multiplicity of individual antigens providing a pattern useful in recognition or diagnosis of a group of biological samples of interest in healthy and diseased samples, or test and control experimental situations for diagnostic purposes.

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Citation (search report)

- [X] US 4829010 A 19890509 - CHANG TSE W [US]
- [E] WO 9940434 A1 19990812 - INVITROGEN [US]
- [E] WO 0004389 A2 20000127 - ZYOMYX INC [US]
- [E] WO 0039580 A1 20000706 - UNIV SYDNEY [AU], et al
- See references of WO 9939210A1

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