configuration of the gap can prevent direct passing-through of charged particles through microwave shield. A reliable and fast ashing process can be realized.

5563032

MOSAIC POLYPEPTIDE AND METHODS FOR DETECTING THE HEPATITIS E VIRUS

Fields Howard; Khudyakov Yury; Favorov Michael Marietta, GA, UNITED STATES Assigned to The United States of America as represented by the Department of Health and Human Services

A nucleic acid encoding a mosaic hepatitis E virus (HEV) polypeptide, consisting of the nucleotide sequence defined in the Sequence Listing as SEQ ID NO:1 is provided. A nucleic acid encoding epitopes 5, 6, 22, 23, 28 and 29 of hepatitis E virus and substantially lacking the nucleic acids intervening the epitope-coding nucleic acids in the native hepatitis E virus is also provided. An isolated nucleic acid that selectively hybridizes under stringent conditions with the mosaic polypeptide-encoding nucleic acid and has at least 70% sequence identity with SEQ ID NO:1 is provided. Also provided are such nucleic acids having at least 80%, 90% and 95% sequence identity. A polypeptide consisting essentially of the amino acid sequence defined in the Sequence Listing as SEQ ID NO:2 is provided. Polypeptides encoded by the present selectively hybridizing nucleic acids, and nucleic acids encoding epitopes 5, 6, 22, 23, 28 and 29 of HEV and substantially lacking the nucleic acids intervening the epitope-coding nucleic acids are also provided.

5563033

DETECTION OF INDIVIDUAL GENE TRANSCRIPTION

Lawrence Jeanne; Johnson Carol V; Xing Yigong Mapleville, RI, UNITED STATES Assigned to The University of Massachusetts Medical Center

In situ hybridization methods for assessing, determining or observing the RNA produced by transcriptionally active genes. In one embodiment, the methods allow simultaneous observation of the gene and its transcripts in a spatially correlated manner. As the in situ hybridization methods have established their ability to maintain the targeted mRNA at the site of its transcription, it can be determined which genes are being expressed and the level of expression can be quantitated.

5563035

ESTROGEN RECEPTOR REGULATION AND ITS USES

Weigel Ronald J Woodside, CA, UNITED STATES Assigned to The Board of Trustees of The Leland Stanford Junior University

ERF-1 is shown to be a transcriptional regulator of the expression of the estrogen receptor, where elevated ERF-1 is related to elevated expression of the estrogen receptor. By monitoring the level of ERF-1, one can relate phenotypic characteristics of carcinomas expressing ERF-1 as prognostic of the response of the tumor to various therapies. In addition, ERF-1 may be used for screening therapeutic drugs which may act as antagonists to initiation of estrogen receptor transcription.

5563036

TRANSCRIPTION FACTOR-DNA BINDING ASSAY

Peterson Michael G; Baichwal Vijay; Strulovici Bert So San Francisco, CA, UNITED STATES Assigned to Tularik Inc

Pharmacological agents useful in the diagnosis or treatment of disease associated with the expression of a gene are identified in high throughput drug screening assays. The methods involve combining a labeled transcription factor, a nucleic acid coupled to a ligand, a candidate pharmacological agent and a receptor immobilized on a solid substrate, such as a microtiter plate, filter, or bead. The nucleic acid has at least that portion of a nucleotide sequence naturally involved in the regulation of the transcription of the gene which is necessary for

sequence-specific interaction with the transcription factor. The resultant combination is incubated under conditions whereby the receptor is bound to the ligand and, but for the presence of said candidate pharmacological agent, the transcription factor is sequence-specifically bound to the nucleic acid. Unbound transcription factor is then removed or washed from the solid substrate and labelled, sequence-specifically bound transcription factor is detected. Incubates which include candidate agents which alter transcription factor binding deviate from control incubates in terms of label signal-typically, binding is disrupted and the signal is diminished. In a preferred embodiment, the entire process is performed by a computer-controllable electromechanical robot with an axial rotatable arm.

5563041

METHOD FOR DETERMINING PLATELET AGGREGATION

Reers Martin Marburg Michelbach, GERMANY Assigned to Behringwerke Aktiengesellschaft

The invention relates to a method for determining platelet aggregation in the presence of an inhibitor of fibrin aggregation, which prevents the formation of an interfering fibrin clot, and to a diagnostic aid for determining the platelet aggregation-inhibiting action of thrombin inhibitors.

5563043

METHOD FOR MEASURING THE BACTERICIDAL AND BACTERIOSTATIC EFFECTS OF ANTIMICROBIAL AGENTS

Schalkowsky Samuel; Hunt Leon G Chevy Chase, MD, UNITED STATES Assigned to Spiral Biotech Inc

A method for measuring the combined bactericidal and bacteriostatic effects of an antimicrobial agent on the number of viable cells in a bacterial population exposed to an application-relevant concentration of the agent, with the rate of change of the number of viable cells as a function of different exposure intervals expressed on a per-drug-free division interval g0 (generation time) basis, so as to facilitate the assessment of projected therapeutic efficacy independent of the particular generation time used in the test environment. (2) A method for measuring the combined bactericidal and bacteriostatic effects of an antimicrobial agent on the acceleration of viable population change at a concentration corresponding to the Discrete Minimal Inhibitory Concentration (DMIC), when the size of the initial viable population remains essentially unchanged in the presence of the agent. (3) A method for measuring the bactericidal component of the effect of an antimicrobial agent from measurements of the initial viable population deposited on nutrient agar media and the number of visible colonies which formed from this deposit in the presence of a selected concentration of the antimicrobial agent. (4) A method for determining the value of the DMIC, and the rate of change of bactericidal activity with changing concentrations of the antimicrobial agent, by applying the method of (3) above at different concentrations of the antimicrobial agent; computing the probability of successful cell division from colony count data at the selected concentrations of the antimicrobial agent; evaluating the functional relationship between the probabilities of division and concentration of the agent; and obtaining from this function the value of the DMIC, the Minimum Cidal Concentration (MCC) where bactericidal activity begins and the rate of change of bactericidal activity with drug concentration.

5563044

PROCESS FOR THE ENZYMATIC PREPARATION OF GRF(1-44)NH2

Felix Arthur M; Heimer Edgar P West Caldwell, NJ, UNITED STATES Assigned to Hoffmann-La Roche Inc

GRF(1-44)-NH2 is prepared by the trypsin catalyzed enzymatic coupling of Leu-NH2 to GRF(1-43)-OH. The latter compound may be obtained by recombinant DNA synthesis. Thus the present method provides an economical pathway to the clinically important GRF(1-44)-NH2 compound.