

The invention relates to medicine, biochemistry and pharmacology, in particular to a method for assessing the anti-inflammatory activity of biologically active substances by determining the activity of inhibiting the production of nitric oxide by macrophage cells.

Summary of the invention consists in obtaining the peritoneal exudate comprising peritoneal macrophages by intraperitoneally administering to a laboratory animal a solution of lectin from *Phytolacta americana*, after 72 hours cells are obtained, which are washed and suspended in a cell culture medium, additionally comprising fetal bovine serum, gentamicin and fluconazole, then the suspension is transferred to a plate with wells and incubated in a CO<sub>2</sub> incubator at 37°C, for 2...4 hours, after which the non-adherent cells are removed, and in each well in the test samples is added a cell culture medium, additionally comprising fetal bovine serum, gentamicin, fluconazole, lipopolysaccharide, ammonium metavanadate and test compounds in various dilutions, are prepared the control and comparative samples, then the samples are mixed and incubated in the CO<sub>2</sub> incubator at 37°C, for 24...48 hours, after which supernatant, HgCl<sub>2</sub>, vanadium chloride solution and Griss reagent are transferred into the wells of the photometric plate, are mixed, left in the dark at 25°C, for 30 min, after which is measured the optical absorption at a wavelength of 540 nm and 630 nm, then is determined the nitric oxide production inhibiting activity. The anti-inflammatory activity of biologically active substances is assessed in relation to the comparative sample, the greater the nitric oxide production inhibiting activity, the greater the anti-inflammatory activity of biologically active substances.

Claims: 1