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The invention relates to medicine and biochemistry and can be used for assessing the athero-protective activity of biologically active substances.

Summary of the invention consists in that biologically active substances in various concentrations are mixed with a solution comprising 20.8…41.6 IU/l of PON1/arylesterase in 0.05 M phosphate buffer solution with the pH 7.4 (final concentration 10.4…20.8 IU/l), then incubated at 37°C for 5…10 min, after which is added a reaction medium comprising 1.5…2.5 mM of p-nitrophenyl acetate (final concentration 1.37…2.28 mM/l), 1.0…2.0 mM/l of $CaCl_2$ (final concentration 0.91…1.82 mM/l) and 10.0…20.0 μM/l of chloramine T (final concentration 9.1…18.3 μM/l) in 0.05 M phosphate buffer solution with the pH 7.4 to obtain the test sample, the control sample is prepared identically as the test sample, but the test substance is replaced with an equivalent amount of 0.05 M buffer phosphate solution with the pH 7.4, and the blank sample is prepared identically as the control sample, but the reaction medium does not contain the PON1/arylesterase enzyme, then is determined the initial absorption of A1 at 405…410 nm, after which the samples are incubated at 37°C, for 30 min and is re-determined the absorption of A2 at 405…410 nm, then is calculated the percentage of activation of PON1/arylesterase of the test substances, at the same time, the higher the percentage of activation of the corresponding concentration of the test substances the higher the athero-protective activity.

Claims: 1