



Manufacturing method and potential adaptogenic activity of the AdaptES preparation

The rapid development of so-called civilisation-related diseases requires a constant search for new and better raw materials of natural origin that work on several levels.

The research topic is a response to the need for new products, including so-called total plant extracts, for the prevention and treatment of these diseases.

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DESCRIPTION

The AdaptES product comprises an appropriate selection of plant extracts and isolated compounds.

Manufacturing method: The extraction technique allows to preserve the required amount of active compounds (HPLC analysis). It yields a product free of residual technological solvents.

Compounds: The preparation contains the so called total extract and naringenin. The compounds can penetrate the monolayer of Caco-2 cells. Naringenin also increases the proliferation of leucocytes.

ADVANTAGES

- Hydrophylic and lipophilic content of the active compounds (which act in synergy);
- no pro-inflammatory effect after stimulation of human peripheral blood leukocytes (no significant changes in interleukin 2 levels), [ELISA test];
- Adaptogenic effect;
- Statistical and significant increase of the proliferation of human peripheral blood leukocytes (relative to the culture control), [CellTiter-Glo® Luminescent Cell Viability Assay (Promega)],
- Influences on the natural immunity of human peripheral blood leukocytes (tested with the Viral Cell Resistance Assay), reducing their susceptibility to infection with viruses (VSV - Vesicular Stomatitis Virus, Indiana strain; ATCC VR-1238™, Rhabdoviridae), [Viral Cell Resistance Assay, determination of virus titer];
- No antiviral effect against tested viruses (HAdV-5 – Human Adenovirus 5 (Adenoid strain 75; ATCC VR-5™, Adenoviridae), [test AVA];
- No hepatotoxic effects, *in vitro*;
- No genotoxicity (Ames test) at the concentrations recommended by the European Union guidelines;
- No hepatotoxicity- *in vivo* mouse model.

CONTACT

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- Konsultacje dla przedsiębiorców i mieszkańców w zakresie wdrażania nowoczesnych rozwiązań Uniwersytetu
- Szkolenia z zakresu ochrony własności intelektualnej
- Raporty i analizy

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