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Peroxisome proliferator-activated receptor (PPAR), a member of the nuclear hormone receptor superfamily, is a transcription factor activated by specific natural or synthetic ligands. It is involved in various cellular processes including adipogenesis, inflammation, cell cycle progression and carcinogenesis. Here, we report the production and characterization of a PPARgamma subtype-specific monoclonal antibody Pγ48.34A, which was raised against full-length human PPARgamma protein. Characterization of Pγ48.34A has been performed by Western blot analysis using several PPARgamma recombinant proteins, mouse tissue lysates as well as immunoprecipitates obtained from indomethacin-treated 3T3-L1 cell line. Moreover, an ELISA system using Pγ48.34A has been optimized to screen various PPARgamma ligands. Based on these results, Pγ48.34A is considered to be a useful tool for elucidating the role of PPARgamma in the various cellular processes.

[PB4-16] [04/18/2003 (Fri) 09:30 - 12:30 / Hall P]

An effect of UDCA in production of IL-1β and NO by Microglia in Rat.

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In recent, growing aged people in coupled with the increased senile dementia, Alzheimer's disease, has been a social interests to be cleared out. Alzheimer Disease(AD), first reported by Alios Alzheimer (1864-1915) in 1907, is a neurodegenrative disease. Nothing exact cause of AD is available by now, but in clinical founding β-amyloid peptide(Aβ) and microtubule associated protein(τ protein) is to involved in the disease, and the most important feature in AD is known to induce chronic inflammation to neuron cell. According to drug development fields, Ursodeoxycholic acid(UDCA) in a certain concentration has immunomodulating function, and thus it suppresses the release of IL-2, IL-4, IFN-γ from T-cell and suppresses the production of immunoglobulin. Additionally, UDCA reduces the release of IL-1β in macrophage. In our study, we chosen UDCA as study agent for the suppression of proinflammatory cytokine, IL-1β and NO in microglial cell, a brain immune cell. As a result, UDCA showed outstanding suppressive responses from microglia in the released level of IL-1β and NO stimulated by various active agent including Aβ. These results are expected UDCA to be a potentially promising AD agent preventing and reducing the symptoms of AD.

[PB4-17] [04/18/2003 (Fri) 09:30 - 12:30 / Hall P]

The protective role of the polysaccharide Ginsan against Staphylococcus aureus : induction of NO and reduction of poinflammatory cytokines

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