ジベンゾイルメタン誘導体による
培養アストロサイトの機能調節に対する研究

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A Dibenzoyl,ethane Derivative Protects Against Hydrogen Peroxide-Induced Cell Death and Inhibits Lipopolysaccharide-Induced Nitric Oxide Production in Cultured Rat Astrocytes

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ABSTRACT: We found that DBM 14-26 protected cultured astrocytes from H_2O_2-induced cytotoxicity at lower concentrations than antioxidants, GSH and *N*-acetyl cysteine. DBM 14-26 prevented the production of reactive oxygen species in the cells exposed to H_2O_2 as evaluated by fluorescent intensity of dichlorofluorescein. Further examination revealed that DBM 14-26 inhibited lipopolysaccharide (LPS)-induced iNOS expression and NO production. DBM 14-26 suppressed LPS-stimulated nuclear factor-κB (NF-κB) activation evaluated by p65 immunostaining and gel retardation electrophoresis. These results indicate that DBM 14-26 protects astrocytes from oxidative stress and suppresses astrocytes activation via inhibition of NF-κB activation. Functional regulation of astrocytes by DBM 14-26 could be a therapeutic candidate for the treatment of neurodegenerative diseases.

抄録　ジベンゾイルメタン誘導体 DBM 14-26 に関する継続研究である。今回、DBM 14-26 による培養アストロサイトの機能調節に関する研究による新たな評価結果を得た。

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