Editorial

Lipid Rafts and Amyloidogenesis

Lipid rafts are the membrane microdomains enriched in cholesterol and sphingolipids, which play important roles in such cellular processes as protein sorting and signal transduction. Lipid rafts have recently received significant attention as they have been shown to be important regions for the generation and accumulation of β-amyloid peptide (Aβ), the main culprit in the pathogenesis of Alzheimer’s disease. For instance, the proteases responsible for the production of Aβ are localized to lipid rafts, and rafts appear to be involved in the pathological aggregation of Aβ. Thus, the relationship between lipid rafts and amyloidogenesis is considered a critical issue to be investigated. In addition, modulation of lipid rafts is an interesting issue in biological sciences. In this special issue, the first two articles by Wataru Araki and Madepalli K. Lakshmana focus on the relation between lipid rafts and the mechanisms of Aβ generation, and the third article by Gunter P. Eckert mainly deals with the manipulation of lipid rafts in neuronal cells. I hope that this special issue provides informative unique collection of mini-reviews which highlight the significance of lipid rafts in amyloidogenesis.

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(Guest Editor)

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