

ABSTRACT

Neurodegenerative diseases (ND) are a major health problem worldwide, ones of the most common cause of deaths for elderly. The threads continue as the prevalence keep on increasing. Intervention is highly expected for the betterment of these diseases control. Neuritin is one of therapeutic candidate and possible answer for neurodegenerative diseases. Optimization of neuritin detection can improve the study of neuritin itself. SmartFlare™ Live Cell RNA Detection is an alternative to neuritin RNA detection. It offers promising advantages that will improve the study related with RNA detection. However, optimization of the protocol is needed there is no proven protocol working on neuritin RNA detection on PC12 cells as a study model.

Keywords: SmartFlare™ Live Cell RNA Detection, Neuritin, PC12 Cells, RNA Detection, *Lignosus rhinoceros*, *Hericium erinaceus*