

CDB SEMINAR

Seong-Seng Tan

Howard Florey Institute

Friday, December 25, 2009 16:00~17:00 C1F CDB Auditorium

How can a protein that protects the brain during injury be harmful during brain development?

Summary

Following brain injury (trauma, stroke), harmful substances can cause cell death. The brain has endogenous protective mechanisms; one of this is removal of toxic substances by protein degradation mediated by ubiquitin. Ndfip1 is an endogenous neuroprotective protein. I will discuss the targets of Ndfip1 ubiquiitination that promotes cell survival and mechanisms behind this. In the embryo, Ndfip1 is important for a different purpose, for regulating cell division of neuroprogenitors. Targetted knock out of Ndfip1 results in deregulation of the cell cycle in the neuroprogenitors but in the adult, lack of Ndfip1 causes degenerative problems in the cortex.

Host: Fumio Matsuzaki Cell Asymmetry, CDB fumio@cdb.riken.jp Tel:078-306-3217 (ext:1633)

RIKEN CENTER FOR DEVELOPMENTAL BIOLOGY (CDB)