ONLINE ISSN : 1880-313X
PRINT ISSN : 0388-6107

Biomedical Research
Vol. 26 (2005) , No. 2 April pp.43-49

Expression of ubiquitin-related enzymes in the suprachiasmatic nucleus with special reference to ubiquitin carboxy-terminal hydrolase UchL1

Xin DONG[1)], Kazuhiro YAGITA[1)], Jing ZHANG[1)] and Hitoshi OKAMURA[1)]

1) Division of Molecular Brain Science, Department of Brain Sciences, Kobe University Graduate School of Medicine

(Received January 4, 2005)
(Accepted January 11, 2005)

ABSTRACT

There is growing evidence that ubiquitin-proteasome system plays an important role for the generation of circadian rhythms in mice as in *Drosophila*. Here we examined the expression of ubiquitin-related enzymes (Ubce5, UbcM4, Ube2v, Ube2d2, UchL1, UchL3, Ubp41, Ufd1L, β-TrCP) in the suprachiasmatic nucleus (SCN). At mRNA level, the expression of these enzymes were faint to moderate except ubiquitin carboxy-terminal hydrolase L1 (UchL1), a dominant deubiquitinating salvaging enzyme. Although strongly expressed in the SCN, UchL1 mRNA did not show the rhythm in the SCN in both light-dark and constant dark conditions.

ubiquitin-related enzymes in the suprachiasmatic nucleus with special reference to ubiquitin carboxy-terminal hydrolase UchL1", *Biomedical Research*, Vol. **26**, pp.43-49 (2005) .

doi:10.2220/biomedres.26.43
JOI JST.JSTAGE/biomedres/26.43