

E2F7 and E2F8 Keep the E2F Family in Balance

Nam-Sung Moon and Nicholas Dyson*

*Correspondence: dyson@helix.mgh.harvard.edu DOI 10.1016/j.devcel.2008.01.016

(Developmental Cell 14, 1-3; January 2008)

Due to a production error, the title for Figure 1 was omitted from the original preview. The title is printed below along with the figure and figure legend.



312 Developmental Cell 14, 312, February 2008 ©2008 Elsevier Inc.

Figure 1. A Feedback Loop between E2F1 and E2F7/8 Permits the Timely Repression of E2F Activity

(A) A feedback loop involving E2F7/E2F8 and E2F1 suggested by the work of Li et al. (2008). Along with its conventional targets, E2F proteins activate the transcription of *E2f7* and *E2f8* at the G1/S phase transition. As E2F7 and E2F8 accumulate in S phase, they, in turn, repress *E2f1* transcription and a subset of E2F1 targets. In the absence of E2F7/E2F8, deregulated E2F1 leads to p53-dependent apoptosis. E2F7 and E2F8 also have additional targets, including stress-response genes. These additional functions of E2F7/E2F8 are required for normal development.

(B) Several different regulatory processes have been described that contribute to the activation and inactivation of E2F. The work by Li et al. (2008) shows that, despite these tiers of regulation, repression by E2F7/E2F8 is critical for the regulation of E2F1 during S and G2 and for the suppression of E2F1-induced apoptosis.