

Stalled polymerases and transcriptional regulation

John W Tamkun¹

1. John W. Tamkun is in the Department of Molecular, Cell and Developmental Biology, University of California, Santa Cruz, Santa Cruz, California 95064, USA. e-mail: tamkun@biology.ucsc.edu

Abstract

After initiating transcription, RNA polymerase II often stalls a short distance downstream of promoters. The recent discovery of stalled polymerases at a large number of eukaryotic promoters suggests that the regulation of stalling plays a more important role in gene expression and development than previously suspected.

Introduction

Eukaryotic transcription consists of a highly coordinated cycle of events, including assembly of the pre-initiation complex and recruitment of RNA polymerase II to the promoter, initiation, elongation and termination.

<http://www.nature.com/ng/journal/v39/n12/full/ng1207-1421.html>