PublisherInfo		
PublisherName	:	BioMed Central
PublisherLocation	:	London
PublisherImprintName	:	BioMed Central

CDK7 in *C. elegans*

ArticleInfo		
ArticleID	:	4454
ArticleDOI	:	10.1186/gb-spotlight-20020418-01
ArticleCitationID	:	spotlight-20020418-01
ArticleSequenceNumber	:	120
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	2
ArticleHistory	:	RegistrationDate : 2002–4–18 OnlineDate : 2002–4–18
ArticleCopyright	:	BioMed Central Ltd2002
ArticleGrants	:	
ArticleContext	:	130593311

Jonathan B Weitzman
Email: jonathanweitzman@hotmail.com

CDK7 is a kinase that is thought to play dual roles in transcription and cell-cycle regulation by phosphorylating the carboxy-terminal domain of RNA polymerase II and also phosphorylating other cyclin-dependent kinases (CDKs). In the April 16 Proceedings of the National Academy of Sciences, Wallenfang and Seydoux at the Johns Hopkins University School of Medicine describe a study of the *C. elegans cdk-7* gene (*Proc Natl Acad Sci USA* 2002, **99:**315-320). They conducted a genome-wide screen for temperature-sensitive (*ts*) embryonic lethal mutants affecting transcription and came up with a *ts* allele of *cdk-7*. The *cdk-7 ts* mutants displayed defects in mRNA synthesis and RNA polymerase phosphorylation, as well as independently regulating cell-cycle progression. They also found that *cdk-7* is essential in the worm for meiosis and for maintaining normal cell ploidy.

References

1. Cyclin-dependent kinase 7: at the cross-roads of transcription, DNA repair and cell cycle control?

2. *Proceedings of the National Academy of Sciences*, [http://www.pnas.org]

3. Johns Hopkins Medical Institutions , [http://www.jhmi.edu]