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Prothymosin alpha interacts with the CREB-binding protein and potentiates transcription.

[Karetsou Z](#), [Kretsovali A](#), [Murphy C](#), [Tsolas O](#), [Papamarcaki T](#).

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Prothymosin alpha (ProTalpha) is a histone H1-binding protein localized in sites of active transcription in the nucleus. We report here that ProTalpha physically interacts with the CREB-binding protein (CBP), which is a versatile transcription co-activator. Confocal laser scanning microscopy reveals that ProTalpha partially colocalizes with CBP in discrete subnuclear domains. Using transient transfections, we show that ProTalpha synergizes with CBP and stimulates AP1- and NF-kappaB-dependent transcription. Furthermore, overexpression of ProTalpha enhances the transactivation potential of CBP. These findings reveal a new function for ProTalpha in transcription activation, probably through CBP-mediated recruitment to different promoters.

PMID: 11897665 [PubMed - indexed for MEDLINE]

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