

Research Article

# **Cocaine-induced DNA-PK relieves RNAP II pausing by promoting TRIM28 phosphorylation.**

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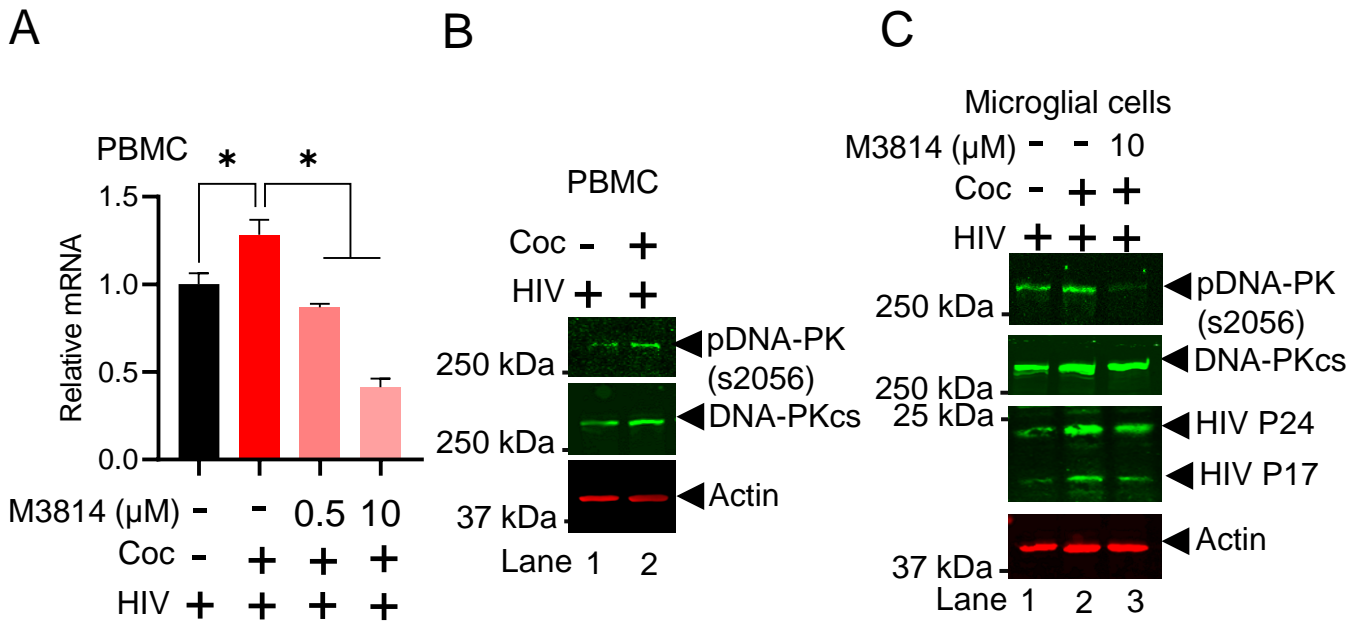
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## Supplementary Table S1

**Table S1: List of primer sequences.**

<b>Primer Sets</b>	<b>Primer name</b>	<b>Sequence (5'-3')</b>	<b>Purpose</b>
<b>1<sup>st</sup> Set primer</b>	GAPDHF	CGGGATTGTCTGCCCTAATTAT	Real time PCR
	GAPDHR	GCACGGAAGGTCACGATGT	Real time PCR
<b>2<sup>nd</sup> Set primer</b>	HIV Promoter F	AGCTTGCTACAAGGGACTTTCC	Real time PCR
	HIV promoter R	ACCCAGTACAGGCCAAAAGCAG	Real time PCR
<b>3<sup>rd</sup> Set primer</b>	HIV Nuc-1F	CTGGGAGCTCTCTGGCTAACTA	Real time PCR
	HIV Nuc-1R	TTACCAGAGTCACACAACAGACG	Real time PCR
<b>4<sup>th</sup> Set primer</b>	HIV Nuc-2F	GACTGGTGAGTACGCCAAAA	Real time PCR
	HIV Nuc-2R	TTCCCACTGCGATCTAATTC	Real time PCR
<b>5<sup>th</sup> Set primer</b>	HIV envF	TGAGGGACAATCGGAGAAG	Real time PCR
	HIV envR	TCTGCACCACTCTTCTCTT	Real time PCR
<b>6<sup>th</sup> Set primer</b>	DNA-PKF1	ACGGTAGGGGAAAGCCATTG	Real time PCR
	DNA-PKR1	CGCTATAGGTCCTCAGCTGC	Real time PCR
<b>7<sup>th</sup> Set primer</b>	ActinF1	AGAGCAAGAGAGGCATCCTG	Real time PCR
	ActinR1	GGGTCATCTTTTCACGGTTGG	Real time PCR

## Supplementary Figure S1



### Supplementary Figure S1: DNA-PK inhibition strongly suppresses cocaine induced HIV transcription and replication.

(A) PBMCs were treated with M3814 for overnight 24 h. Next day cells were treated with cocaine for 3 h and thereafter infected with replication competent HIV. DNA-PK (A) and HIV transcripts (in main figure 5D and E) were quantified by real-time PCR. The result is expressed as mean  $\pm$  SD and analyzed by two-way ANOVA followed by Tukey's multiple comparisons test. Asterisks over the bars indicate significant differences: \* $p < 0.05$ . (B) PBMCs were exposed to cocaine for a duration of 3 h, followed by infection with HIV. Subsequently, nuclear lysates were subjected to analysis via immunoblotting using specific antibodies targeting phosphorylated pDNA-PK (S2056), DNA-PKcs, and Actin. (C) Microglial cells were exposed to M3814 for a duration of 24 hours. The following day, the cells were subjected to treatment with cocaine and subsequent infection with HIV. Nuclear lysates were then analyzed via immunoblotting, utilizing specific antibodies targeting phosphorylated pDNA-PK (S2056), DNA-PKcs, HIV p24, and Actin.