

## 8-oxodG is a driver of the transcription machinery

8-Oxo-7,8-dihydro-2'-deoxyguanosine (8-oxodG), a key product of DNA oxidation, has been identified as an epigenetic factor that influences the transcription process. However, the precise role of 8-oxodG in transcription regulation is not fully established. To investigate the involvement of 8-oxodG in global transcription regulation, we applied two complementary strategies. First, we inhibited RNAPII activity to determine if the presence of 8-oxodG is dependent on RNAPII mobility. Second, we reduced the amount of genomic 8-oxodG to see how it affected RNAPII mobility. Our findings indicate that 8-oxodG actively enhances transcription rather than being a passive participant.

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