

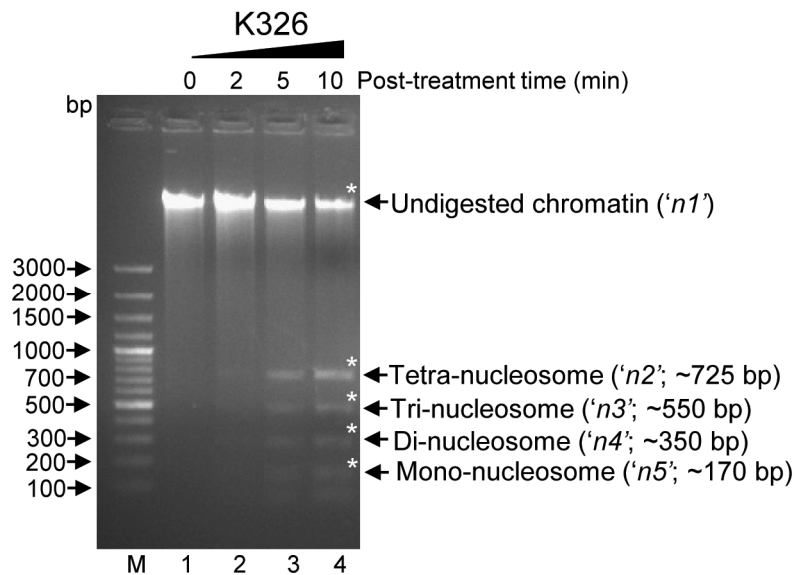
Existence of differential epigenetic control in a pair of cultivated tobacco (*Nicotiana tabacum* L.) cultivars harbouring contrast nicotine levels

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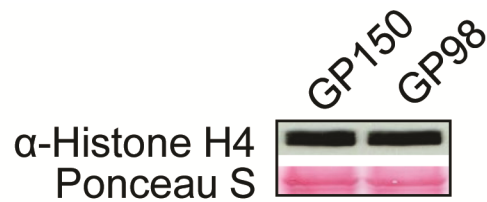
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Received 19 May 2023; revised 10 March 2025

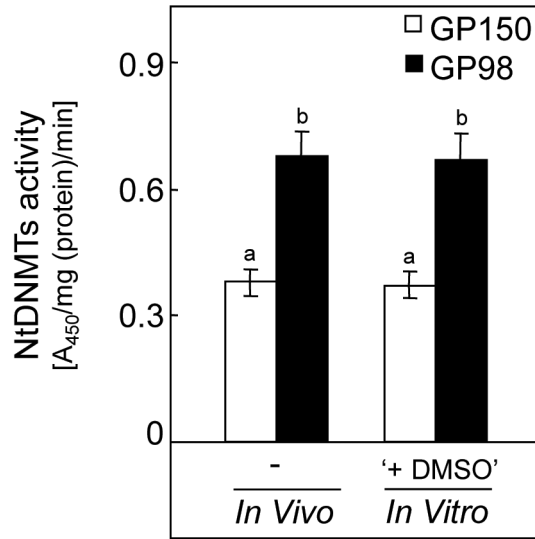
Supplementary Data



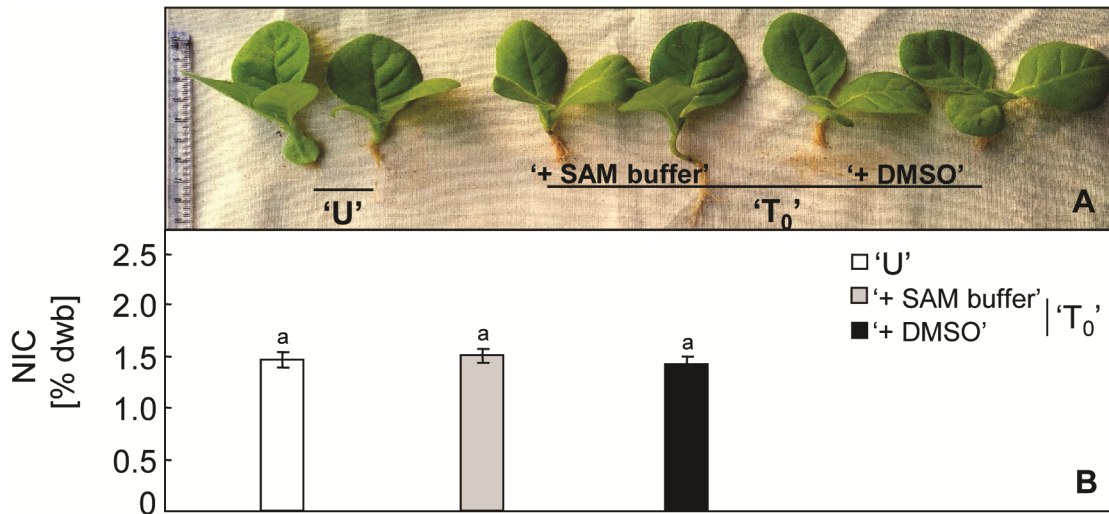
Suppl. Fig. 1 — Time-scale MNase I digestion of chromatin.



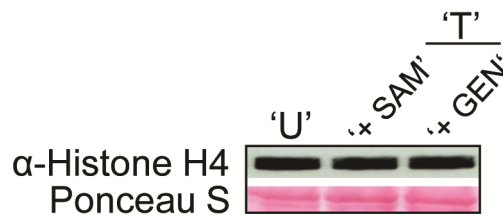
Suppl. Fig. 2 — Immunoblotting of nuclear-protein extracts of GP150 and GP98.



Suppl. Fig. 3 — Effect of DMSO on NtDNMTs activity of GP150 and GP98.



Suppl. Fig. 4 — Phenotypic and NIC evaluation of tobacco plantlets.



Suppl. Fig. 5 — Immunoblotting of nuclear-protein extracts of 'U' and 'T'.

Suppl. Table 1 — Quantification of MNase I digested chromatin. Chromatin extracted from K326 cv. was exposed to MNase I for an indicated time and resolved on 2% (w/v) agarose-gel. The signal-intensity (%) of undigested (*n1*) and MNase I digested chromatin DNA (*n2-n5*) was measured by densitometry-scanning. *L1*, *L2*, *L3* and *L4* showed chromatin subjected to MNase I digestion for 0, 2, 5 and 10 min, respectively.

K326				
Bands	<i>L1</i>	<i>L2</i>	<i>L3</i>	<i>L4</i>
<i>n1</i>	100	100	48.67	39.89
<i>n2</i>	0	0	17.99	21.08
<i>n3</i>	0	0	12.39	15.95
<i>n4</i>	0	0	10.91	11.97
<i>n5</i>	0	0	10.03	11.11

L - Lane

Suppl. Table 2 — Quantitative evaluation of nucleosomes-release as a functional-readout of MNase I digested chromatin from GP150 and GP98. Chromatin extracted from GP150 and GP98 were exposed to MNase I for an indicated time and resolved on 2% (w/v) agarose-gel. The signal-intensity (%) of undigested (*n1*) and MNase I digested chromatin DNA (*n2-n5*) was measured by densitometry-scanning. *L1-3* and *L4-6* showed GP150 and GP98 chromatin subjected to MNase I digestion for 0, 5 and 10 min, respectively.

Bands	GP150			GP98		
	<i>L1</i>	<i>L2</i>	<i>L3</i>	<i>L4</i>	<i>L5</i>	<i>L6</i>
<i>n1</i>	100	42	35	100	66	48.95
<i>n2</i>	0	18.95	21.17	0	12.78	18.88
<i>n3</i>	0	13.70	15.82	0	8.02	12.59
<i>n4</i>	0	13.01	14.84	0	6.77	10.49
<i>n5</i>	0	12.10	13.38	0	6.02	9.09

L - Lane

Suppl. Table 3 — Quantitative evaluation of nucleosomes-release as a functional-readout of MNase I digested chromatin from 'U' and 'T'. Chromatin extracted from 'U' and 'T' were exposed to MNase I for an indicated time and resolved on 2% (w/v) agarose-gel. The signal-intensity (%) of undigested (*n1*) and MNase I digested chromatin DNA (*n2-n5*) was measured by densitometry-scanning. *L1-3* and *L4-9* showed 'U' and 'T' chromatin subjected to MNase I digestion for 0, 5 and 10 min, respectively.

Bands	'U'				'T'			' + GEN'	
	<i>L1</i>	<i>L2</i>	<i>L3</i>	<i>L4</i>	' + SAM'		<i>L7</i>	<i>L8</i>	<i>L9</i>
<i>n1</i>	100	47.52	29.87	100	<i>L5</i>	<i>L6</i>	100	32.27	26
<i>n2</i>	0	17.77	23.27	0	68.40	39.33	0	21.91	22.40
<i>n3</i>	0	14.05	19.81	0	12.03	23.60	0	17.53	19.60
<i>n4</i>	0	11.16	16.04	0	7.55	15.73	0	15.14	16.80
<i>n5</i>	0	9.50	11.01	0	6.37	11.24	0	13.15	15.20

L - Lane, 'U' - Untreated and 'T' - Treated K326 cv., wherein '+ SAM' and '+ GEN' corresponds to tobacco plantlets grown on MS media supplemented with 1 mM S-adenosyl methionine and 50 μM genistein, respectively.