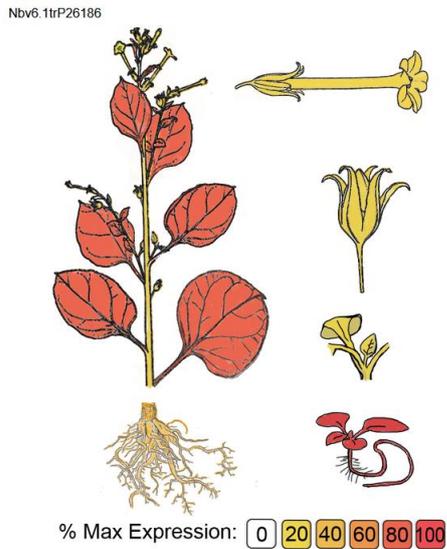


## Supplementary material

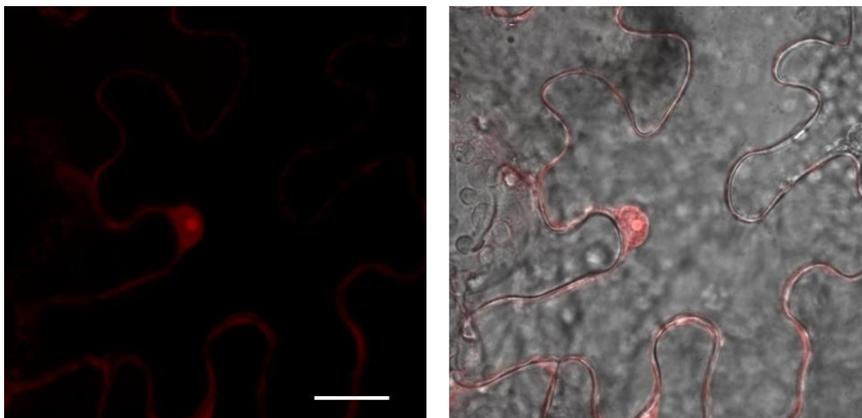


**Figure S1.** *NbMIG21* pattern of expression according to Version 6 Gene expression Atlas (<https://sefapps02.qut.edu.au/atlas/tREX6.php>).

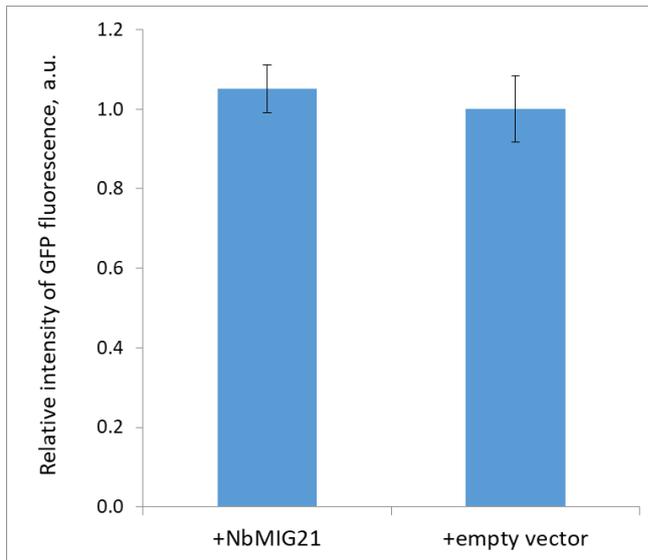
Pfam ID: UBN\_AB etllkrvkklrlkeeeeklkellekLkeaidevmpeqiekYekevaalaeakaakka.....d

MASLQCHKPAQHAPSTLCQKTTT~~VT~~CNKANNEHHSFADKMKDMTDKMYHHD~~SHNHQ~~SACHGTKTQQTAACHGTKTQQSAAC  
HGTKTQQSAASHRTKTQQTACHGTSANGTKTQLSVACHGTKTQQSAASHGTKTQQTACHGTSATATHARACGKKKEGSFMH  
KMRDQMRSRNRNRKDGSCSDGSDSSSSSSDESDNENCGRTKNRGSC

**Figure S2.** Motif search service (<https://www.genome.jp/tools/motif/>) revealed that *NbMIG21p* fragment from 15 to 81 positions (red) contains motif corresponding to ubinuclein conserved middle domain (PF14075) (framed).



**Figure S3.** *NbMIG21p*:RFP intracellular localization. Images of 35S-*NbMIG21p*:RFP expressing epidermal cells of *N. benthamiana* leaves 3 dpi obtained using confocal fluorescence microscopy. Projection of several confocal sections (left) superimposed on a bright field image of the same cell (right). Bar = 20  $\mu$ m.



**Figure S4.** Relative intensity of GFP fluorescence in the analyzed TMV:GFP-expressing foci. Difference between control and NbMIG21-overexpressing leaves is not significant at  $p < 0.05$  (Student's t-test).

**Table S1. PrMIG21 cis-acting elements analysis**

Regulatory sequence	Position	Sequence	Function of site
<b>ABRE</b>	-1016	ACGTG	cis-acting element involved in the abscisic acid responsiveness
<b>ARE</b>	-944 -91	AAACCA AAACCA	cis-acting regulatory element essential for the anaerobic induction
<b>Box 4</b>	-235	ATTAAT	part of a conserved DNA module involved in light responsiveness (Kato et al. 1995)
<b>MRE</b>	-704	AACCTAA	MYB binding site involved in light responsiveness
<b>MYB</b>	-767 -641	CAACCA	MYB-binding site (Wei et al. 2020)
<b>MYC</b>	-913 -607	CAATTG	MYC-binding site (Allevato et al. 2017)
<b>Myb</b>	-801	TAACTG	Myb-binding site (Arce-Rodríguez, Martínez, and Ochoa-Alejo 2021)
<b>TCA</b>	-561	TCATCTTCAT	salicylic acids response motif (Goldsbrough, Albrecht, and Stratford 1993)
<b>STRE</b>	-1008	AGGGG	present in the promoters of stress-regulated genes and is recognized by the transcription factors Msn2p/4p (Martínez-Pastor et al. 1996)
<b>G-box</b>	-1016	CACGTT	cis-acting regulatory element involved in light responsiveness

**Table S2. Oligonucleotides used for qRT-PCR and cloning**

<b>Name</b>	<b>Sequence</b>
qRT-NbMIG21_f	GCAAATGGCACCAAAACTC
qRT-NbMIG21_r	GTAGCAGTGGCACTTGTTTC
18S rRNA_f	ACGGCTACCACATCCAAG
18S rRNA_r	ACTCATTCCAATTACCAGACTC
PP2A_f	ATTGCTGCCTGTGGTTATTAC
PP2A_r	ATAGACTGAAGTGCTTGATTGG
N-NbMIG21-Acc65I_f	<b>GGTACCATGGCATCACTTCAGTGC</b>
N-NbMIG21-BamHI_r	<b>GGATCCGCAGCTCCCTCTATTC</b>
C-NbMIG21-BamHI_f	<b>GGATCCCTGGCATCACTTCAGTGC</b>
C-NbMIG21-SalI_r	<b>GTCGACTCAGCTCCCTCTATTCTTG</b>
GFP-Acc65I_f	<b>GGTACCATGAGCAAGGGCGAGG</b>
GFP-BamHI_r	<b>GGATCCTTTCTTGTACAGCTCGTCC</b>
YN- Acc65I_f	<b>GGTACCATGGTGGTGAGCAAGGGCG</b>
YN- BamHI_r	<b>GGATCCCATGATATAGACGTTGTGGC</b>
YC- Acc65I_f	<b>GGTACCATGGCCGACAAGCAGAAGAAC</b>
YC- BamHI_r	<b>GGATCCTTTGGACTTGTACAGCTC</b>
NbCoilin-Acc65I_f	<b>GGTACCATGGAGGGCGTTAGGCTTC</b>
NbCoilin-BamHI_r	<b>GGATCCAATTTTGTCTGGGATCTTAGG</b>
NbFib2-Acc65I_f	<b>GGTACCATGGTTGCACCAACTAGAGG</b>
NbFib2-BamHI_r	<b>GGATCCGGCAGCAGCCTTCTGCTTC</b>
6H-NbMIG21-Acc65I_f	<b>GGTACCGCATCACTTCAGTGCC</b>
PrNtPME-HindIII_f	<b>AAGCTTGCTAGCAGGAACTAATCAGG</b>
PrNtPME- Acc65I_r	<b>GGTACCGAGCTCCCGGCGAAGAAATC</b>
PrMIG21-HindIII_f	<b>AAGCTTGTTACCATGTCTATGTGGAGC</b>
PrMIG21-NruI_r	<b>TCGCGATGAATATGTCTGAAACTGAC</b>
PrAELP-HindIII_f	<b>AAGCTTAAAAACCTAACAATCC</b>
PrAELP-NcoI_r	<b>CCATGGCTCTAGTTGTTTTAGAG</b>
PrKPILP-HindIII_f	<b>AAGCTTAAATGAGAATTTACTTAAG</b>
PrKPILP-NcoI_r	<b>CCATGGTGTTAAGGATATGGTTAATG</b>
PrThio-HindIII_f	<b>AAGCTTACCAGCACCTAAGC</b>
PrThio-NcoI_r	<b>CCATGGAGTTACTTTGAATGAGTAAAAAAG</b>