

Figure S1. DAB staining (a) and callose deposition (b) of DOR-treated tomato leaves. a) Leaves from two-week-old tomato plants were detached and placed in a 24-well tissue-culture plate with 500 μ l of 20 or 200 μ M DOR for 1 or 3 days. After treatment, leaves were stained with DAB, as reported in section 3.6 and observed under an optical microscope at 4x magnification. b) Leaves from two-week-old tomato plants were detached and placed in a 24-well tissue-culture plate with 500 μ l of 20 or 200 μ M DOR, for 1 or 3 days. After treatment, leaves were stained with 0.01% anilin blue as described in section 3.8 and observed under an optical microscope at 10x magnification. Images are representative of three independent experiments; dat: days after treatment.

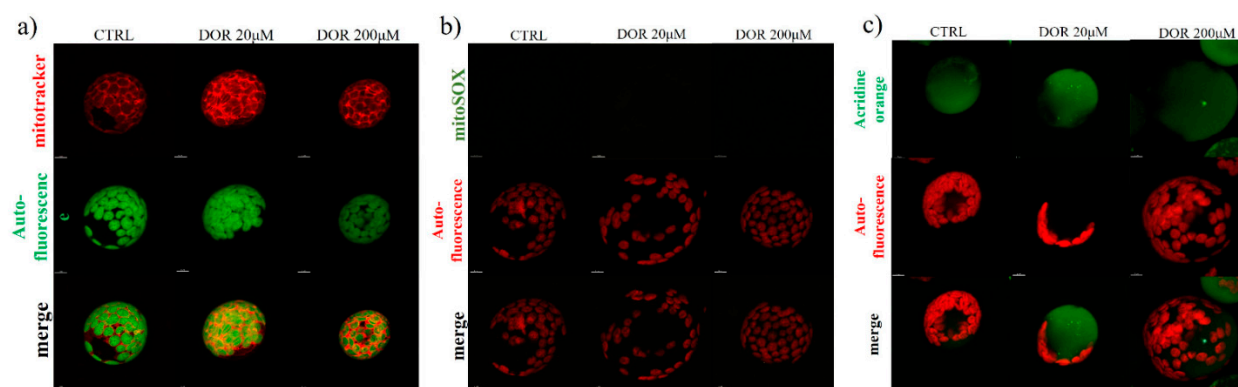


Figure S2. Confocal microscope images of mitochondrial network (a), mitochondria-derived ROS (b) and vacuole (c) of protoplasts treated with DOR. a) Protoplasts from leaves of two-week-old tomato plants were treated with 20 or 200 μM DOR for 1 h, incubated with 1 μM MitoTracker and analyzed under a confocal microscope at 579 nm excitation and 599 nm emission, for mitochondria imaging. b) Protoplasts from leaves of two-week-old tomato plants were treated with 20 or 200 μM DOR for 1 h, incubated with 3 μM MitoSOX and analyzed under a confocal microscope at 510 nm excitation and 580 nm emission, for mitochondrial ROS imaging. c) Protoplasts from leaves of two-week-old tomato plants were treated with 20 or 200 μM DOR for 1 h, incubated with 3 μM acridine orange and analyzed under a confocal microscope at 488 nm excitation and 526 nm emission, for vacuole imaging. Bar = 7 μm .

Table S1. List of oligonucleotides used in qRT-PCR analysis of chloroplast-triggered cell death gene expression of tomato leaves treated with DOR.

Gene	Primer sense 5'-3'	Primer antisense 5'-3'
<i>SolycUBI3</i>	TCTTCCGACACCATCGACAA	AGAACTGCAACACAGTGAGC
<i>SolycACT</i>	CAGCAGATGTGGATCTCAA	CTGTGGACAATGGAAGGAC
<i>SolycACD2</i>	GCACTGAACATGACAGTCC	CATGAGAAGGCAGAGTACAAGG
<i>SolycEX1</i>	GAAGAGAAAGCCAGTTCAGC	GCTACGTTGACCTTGAAGCC