



Figure 4

Reconstitution of ROS generation in LD thylakoids by Trxm, NTRC and NADPH.

Light-induced hydroxyl radical formation in SD and LD thylakoids is shown by indirect spin trapping with 4-POBN. Thylakoid membranes ($20 \mu\text{g ml}^{-1}$) were illuminated for 2 min ($500 \mu\text{mol quanta m}^{-2}\text{s}^{-1}$) before detection of the radical. When indicated, $200 \mu\text{M}$ NADPH, $0.3 \mu\text{M}$ Trx m4 and $0.3 \mu\text{M}$ NTRC were added to the assay before starting the illumination. All EPR signals were normalized to the signal of SD thylakoids without addition (100%). Grey bars: SD, white bars: LD. Mean values are shown ($n=3$; *, $P < 0.05$ (comparison with LD no protein added) according to Tukey test.