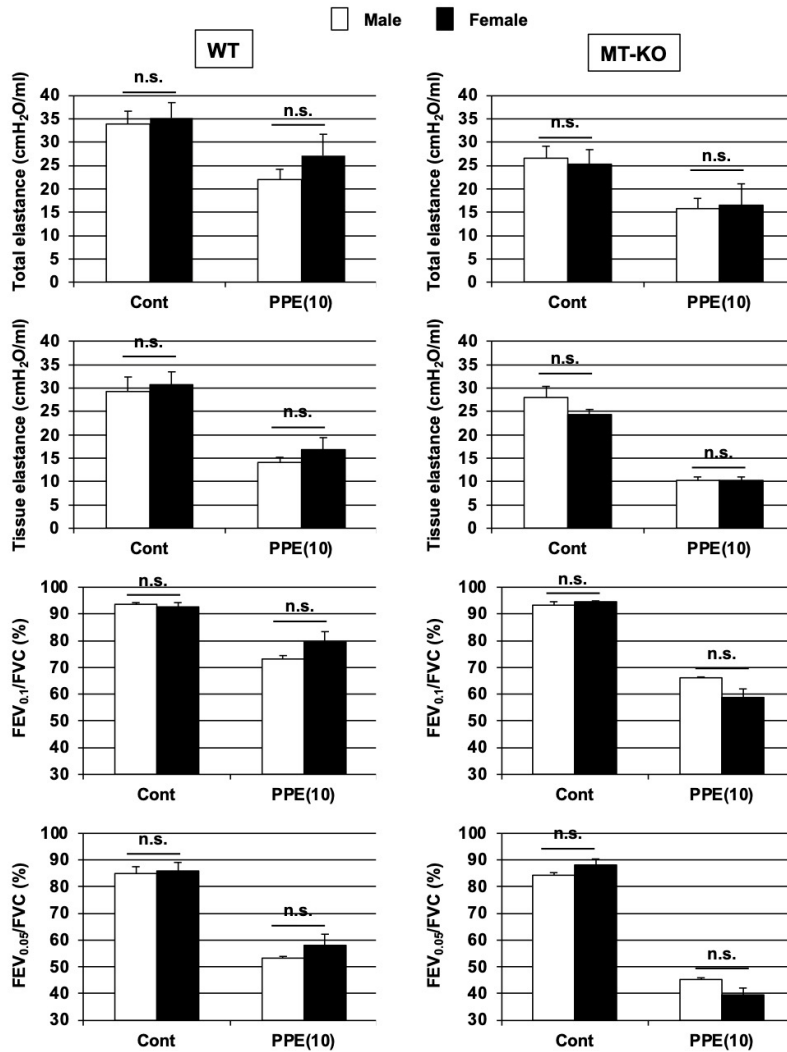


Exacerbation of elastase-induced emphysema via increased oxidative stress in metallothionein-knockout mice

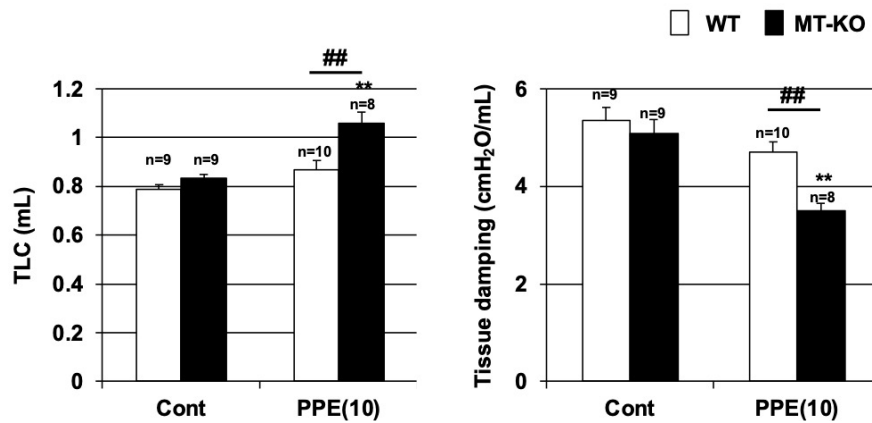
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Supplementary Figure S1.

Effect of metallothionein on PPE-induced pulmonary damage.

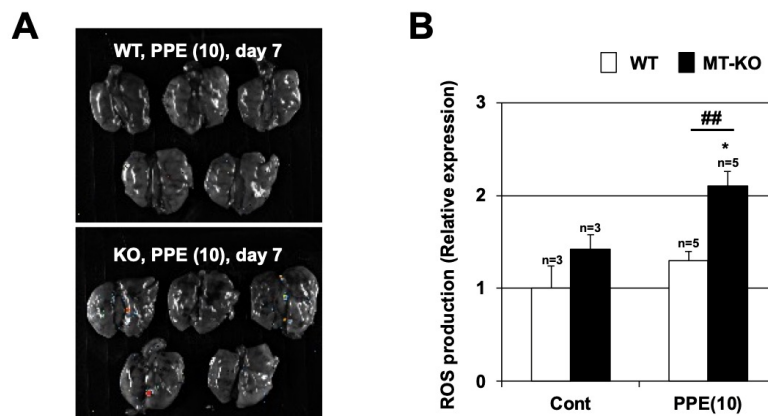
Wildtype (WT) and MT-1 and -2 gene knockout (MT-KO) mice were treated with sterile saline (Cont) or PPE (10 U/kg) only once, on day 0. Total elastance, tissue elastance, FEV_{0.05}/FVC, and FEV_{0.1}/FVC values were determined on day 14 as described in the Materials and Methods. Values are the mean \pm S.E.M. n.s.: not significant (Male vs Female). The experiments that produced the data shown in this figure were performed at least twice.



Supplementary Figure S2.

Effect of metallothionein on PPE-induced respiratory dysfunction.

Wildtype (WT) and MT-1 and -2 gene knockout (MT-KO) mice were treated with sterile saline (Cont) or PPE (10 U/kg) only once, on day 0. TLC, and tissue damping values were determined on day 14 as described in the Materials and Methods (C). Values are the mean \pm S.E.M. ** or ### $p < 0.01$ (**, vs Control; ###, vs WT). The experiments that produced the data shown in this figure were performed at least twice.



Supplementary Figure S3.

Effect of metallothionein on ROS production after 7 days of PPE administration.

(A, B) Wildtype (WT) and MT-1 and -2 gene knockout (MT-KO) mice were treated with sterile saline (Cont) or PPE (10 U/kg) only once, on day 0. Luminescent probe (L-012, 75 mg/kg) was administered 7 days after the PPE administration. Isolated lungs were imaged using a FUSION chemiluminescence imaging system (A). The summed pixel intensity of the ROS signal was determined using standard software for FUSION. The data for Cont is the same as in Figure 6 (B). Values are the mean \pm S.E.M. * $p < 0.05$; ### $p < 0.01$ (*, vs Control; ###, vs WT). The experiments that produced the data shown in this figure were performed at least twice.