

## Supplementary Data

### Differential Roles of Cystathionine Gamma-Lyase and Mercaptopyruvate Sulfurtransferase in Hapten-Induced Colitis and Contact Dermatitis in Mice

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Supplementary Table 1: Primer sets for quantitative RT-PCR.

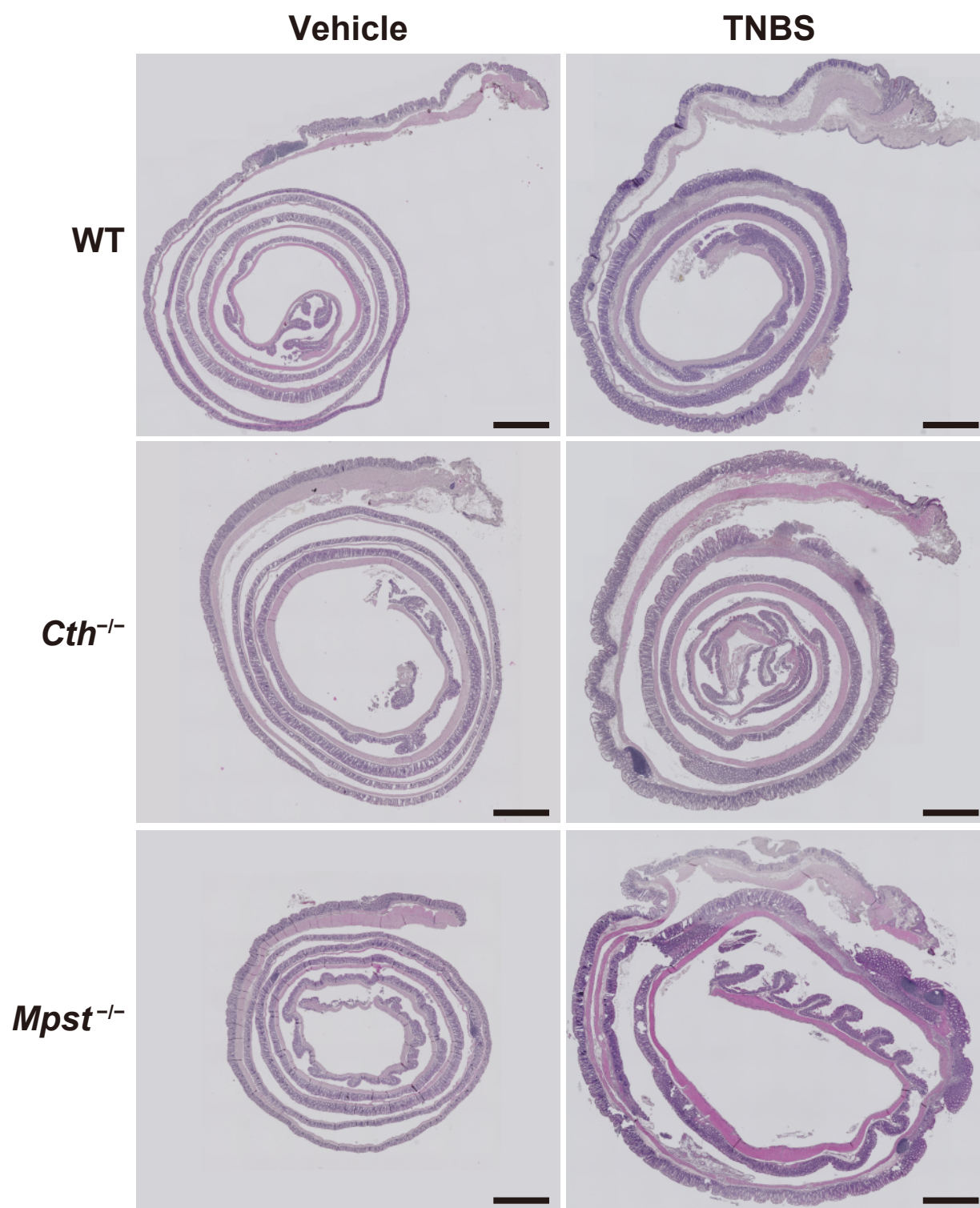
Supplementary Figure 1: Hematoxylin/eosin-stained colon sagittal sections of TNBS-induced colitis in wild-type (WT), CTH-deficient (*Cth*<sup>-/-</sup>), and MPST-deficient (*Mpst*<sup>-/-</sup>) mice.

Supplementary Figure 2: Hematoxylin/eosin-stained colon sagittal sections of oxazolone-induced colitis in wild-type (WT), CTH-deficient (*Cth*<sup>-/-</sup>), and MPST-deficient (*Mpst*<sup>-/-</sup>) mice.

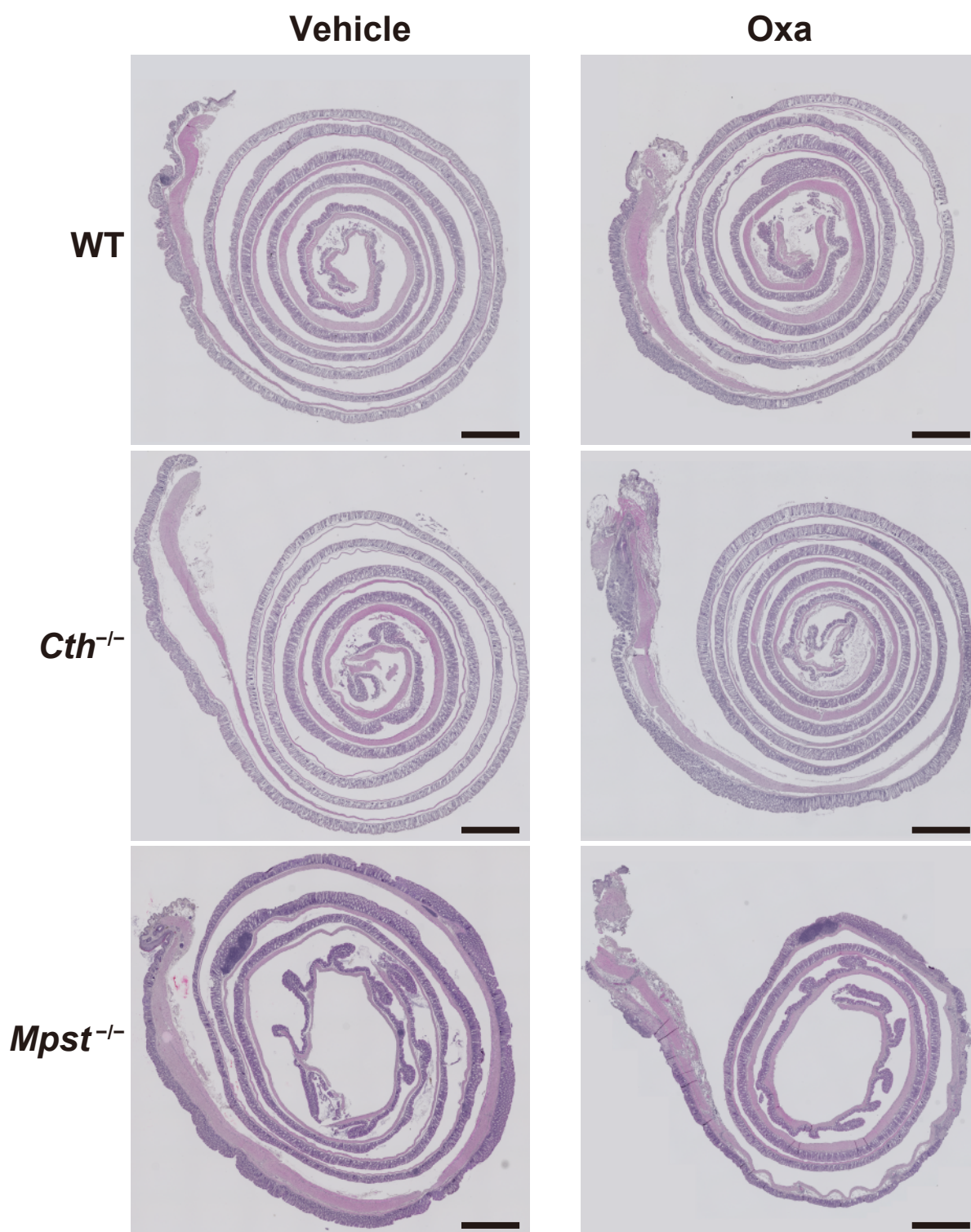
Supplementary Figure 3: Expression levels of various cytokine mRNAs in the ear during trinitrochlorobenzene (TNCB)-induced contact dermatitis at 2 h after the challenge. Levels of IL-1 $\beta$  (A), IL-6 (B), TNA $\alpha$  (C), IFN $\gamma$  (D), IL-2 (E), IL-4 (F), TGF $\beta$  (G), IL-17 (H), and IL-10 (I) mRNA levels were normalized by the housekeeping HPRT1 mRNA levels and the relative expression *versus* vehicle-treated wild-type samples were calculated. Data are the mean  $\pm$  SD with sample numbers in parentheses. Differences are significant by a one-way ANOVA with Tukey's multiple comparison test at \* $p$ <0.05, \*\* $p$ <0.01, and \*\*\* $p$ <0.001 *versus* vehicle-treated samples of each genotype.

**Supplementary Table 1** Primer sets for quantitative RT-PCR

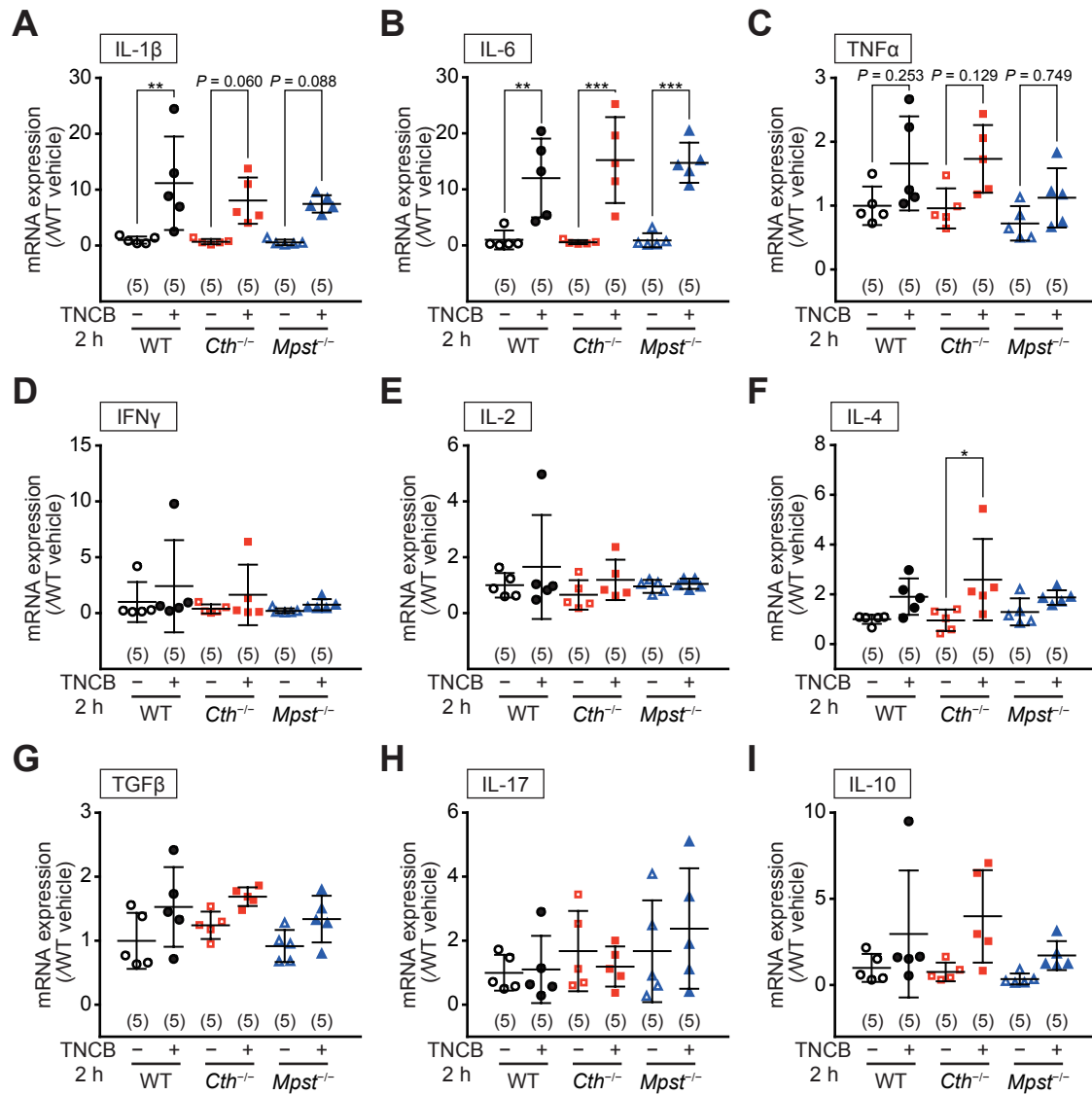
Gene		Sequence (5'-3')	Amplicon size (base pair)
<i>Cth</i>	Forward	5'-TGGTGCTGCCCCATTTCGTTG-3'	265
	Reverse	5'-GCCACCCTCCTGAAGTACCT-3'	
<i>Hprt1</i>	Forward	5'-ATTGTGGCCCTCTGTGTGCT-3'	165
	Reverse	5'-AACTTTTATGTCCCCCGTTGACT-3'	
<i>Ifng</i>	Forward	5'-TGGCTTTGCAGCTCTTCCTC-3'	157
	Reverse	5'-TCCTTTTGCCAGTTCCTCCA-3'	
<i>Il1<math>\beta</math></i>	Forward	5'-AGCACCTTCTTTTCCTTCATCTTG-3'	148
	Reverse	5'-CCGACAGCACGAGGCTTTTT-3'	
<i>Il2</i>	Forward	5'-CTGCGGCATGTTCTGGATTT-3'	125
	Reverse	5'-TGGCACTCAAATGTGTTGTCAG-3'	
<i>Il4</i>	Forward	5'-CATCGGCATTTTGAACGAGGTCA-3'	240
	Reverse	5'-CTTATCGATGAATCCAGGCATCG-3'	
<i>Il6</i>	Forward	5'-CCACTTCACAAGTCGGAGGCTTA-3'	169
	Reverse	5'-CCAGTTTGGTAGCATCCATCATT-3'	
<i>Il10</i>	Forward	5'-AAGACAATAACTGCACCCACTTCC-3'	164
	Reverse	5'-GCAACCCAAGTAACCCTTAAAGTCC-3'	
<i>Il17</i>	Forward	5'-GGCCCTCAGACTACCTCAACC-3'	131
	Reverse	5'-CTTTCCCTCCGCATTGACAC-3'	
<i>Mpst</i>	Forward	5'-CATCAAGACCCACGAGGACA-3'	188
	Reverse	5'-TCTTCTCCAGGCCTTCGTTG-3'	
<i>Tgfb</i>	Forward	5'-ACATCACACGGGACCAAACC-3'	154
	Reverse	5'-AGGCACAGGGTCATCATCAA-3'	
<i>Tnfa</i>	Forward	5'-GCCTCTTCTCATTCCTGCTTGT-3'	147
	Reverse	5'-ATGATCTGAGTGTGAGGGTCTGG-3'	



Supplementary Figure 1. Hematoxylin/eosin-stained colon sagittal sections of TNBS-induced colitis in wild-type (WT), CTH-deficient (*Cth*<sup>-/-</sup>), and MPST-deficient (*Mpst*<sup>-/-</sup>) mice. Bars indicate 1 mm.



Supplementary Figure 2. Hematoxylin/eosin-stained colon sagittal sections of oxazolone-induced colitis in wild-type (WT), CTH-deficient (*Cth*<sup>-/-</sup>), and MPST-deficient (*Mpst*<sup>-/-</sup>) mice. Bars indicate 1 mm.



Supplementary Figure 3. Expression levels of various cytokine mRNAs in the ear during trinitrochlorobenzene (TNCB)-induced contact dermatitis at 2 h after the challenge. IL-1 $\beta$  (A), IL-6 (B), TNF $\alpha$  (C), IFN $\gamma$  (D), IL-2 (E), IL-4 (F), TGF $\beta$  (G), IL-17 (H), and IL-10 (I) mRNA levels were normalized by the housekeeping HPRT1 mRNA levels and the relative expression *versus* vehicle-treated wild-type samples were calculated. Data are the mean  $\pm$  SD with sample numbers in parentheses. Differences are significant by a one-way ANOVA with Tukey' s multiple comparison test at \* $p$ <0.05, \*\* $p$ <0.01, and \*\*\* $p$ <0.001 *versus* vehicle-treated samples of each genotype.