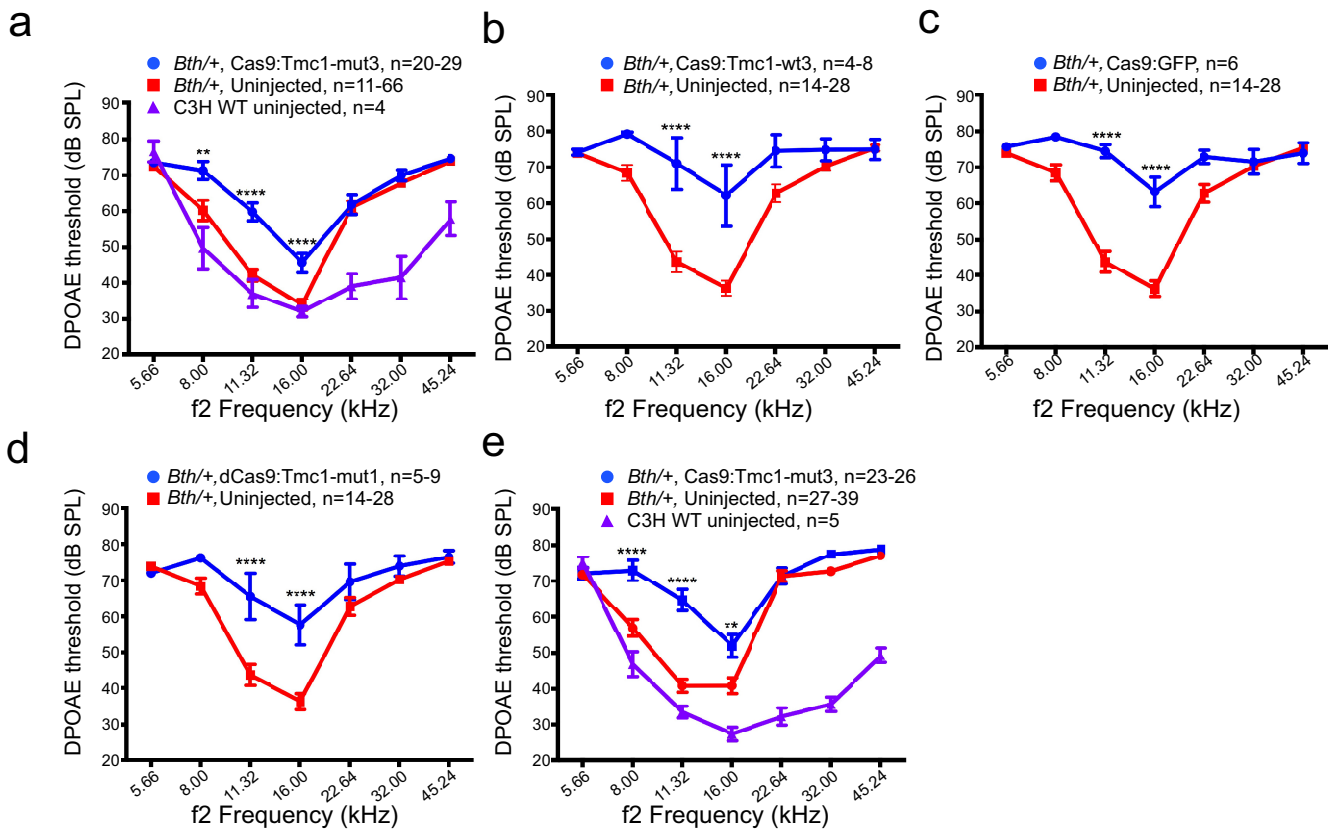

Extended Data Figure 5 | Effect of *in vivo* injection of Cas9–sgRNA–lipid complexes on DPOAE thresholds. a–d, DPOAE thresholds four weeks after injection were elevated compared with uninjected ears at three frequencies following treatment with Cas9–Tmc1-mut3 sgRNA (**a**), and were elevated at two frequencies following treatment with Cas9–Tmc1-wt3 sgRNA (**b**), Cas9–GFP sgRNA (**c**), or dCas9–Tmc1-mut1 sgRNA (**d**). **e**, Eight weeks after Cas9–Tmc1-mut3 sgRNA injection, DPOAE thresholds were elevated at three frequencies in the injected group. Mean DPOAE thresholds of untreated wild-type (WT) C3H mice at four weeks (**a**) or eight weeks (**e**) of age are also shown in purple. Statistical analysis of DPOAE thresholds was performed by two-way ANOVA with Bonferroni correction for multiple comparisons: $^{**}P < 0.01$, $^{****}P < 0.0001$. Values and error bars reflect mean ± s.e.m. Among the different frequencies assayed, the number of ears tested (n) varies within the range shown (Supplementary Table 2). The elevation of DPOAE thresholds despite enhanced hair cell survival (Fig. 2d, g) suggests that the surviving OHCs may not be fully functional. IHCs can respond to sound and excite auditory nerve fibres in the absence of OHC amplification, although at higher SPLs. Thus, an improvement in ABR thresholds and suprathreshold amplitudes can occur without concomitant DPOAE enhancement if the functional improvements are restricted to the surviving IHCs.