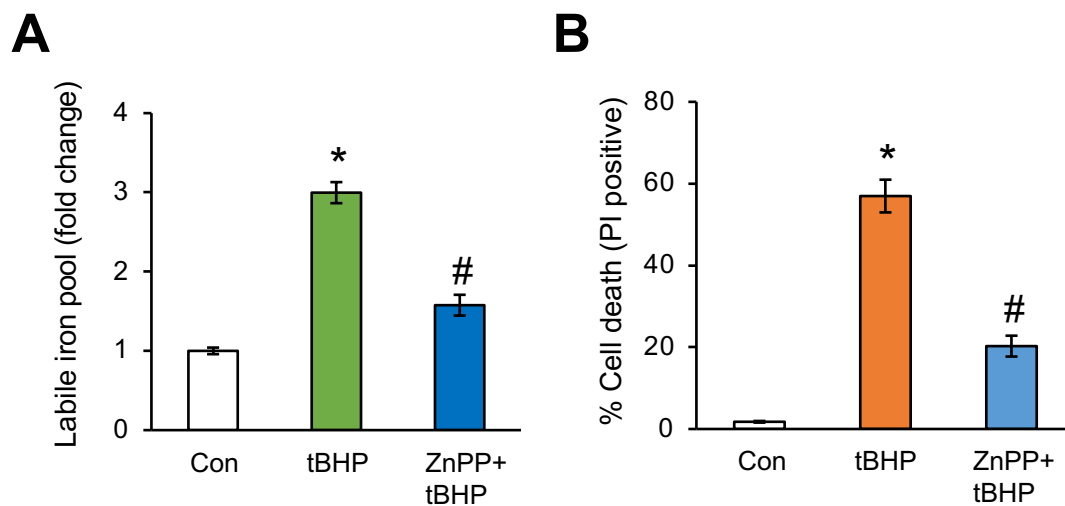
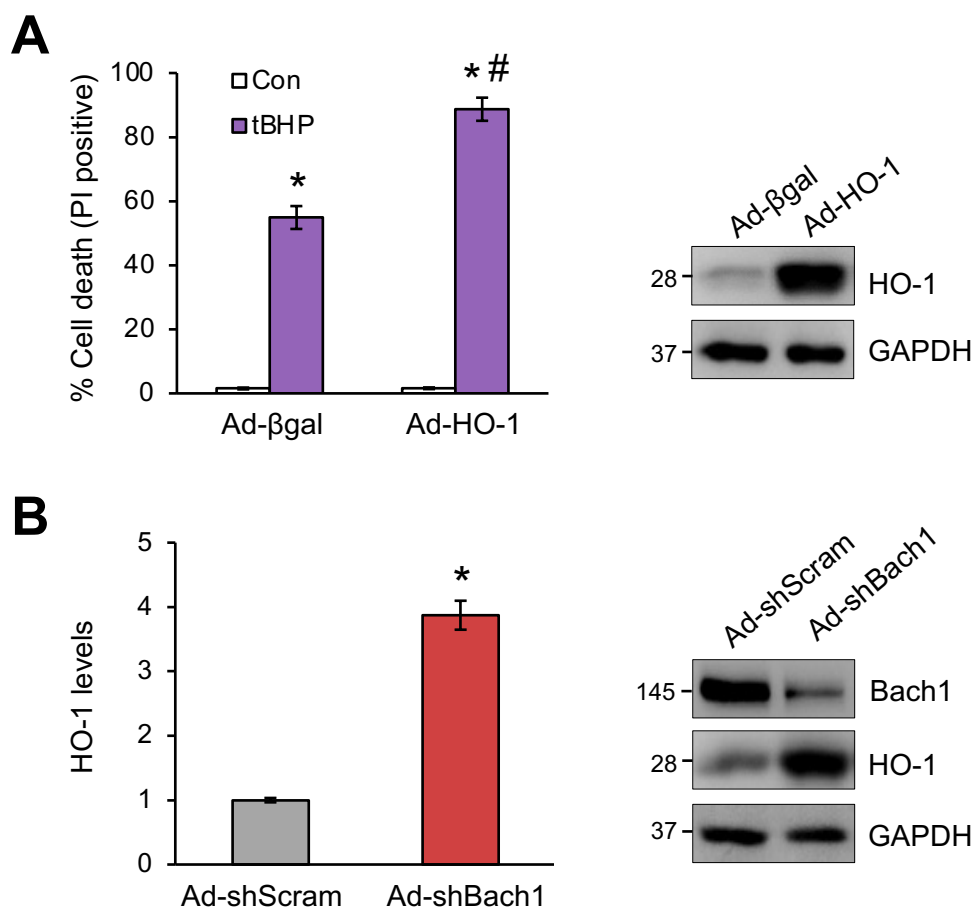


## Supplemental Figure 1



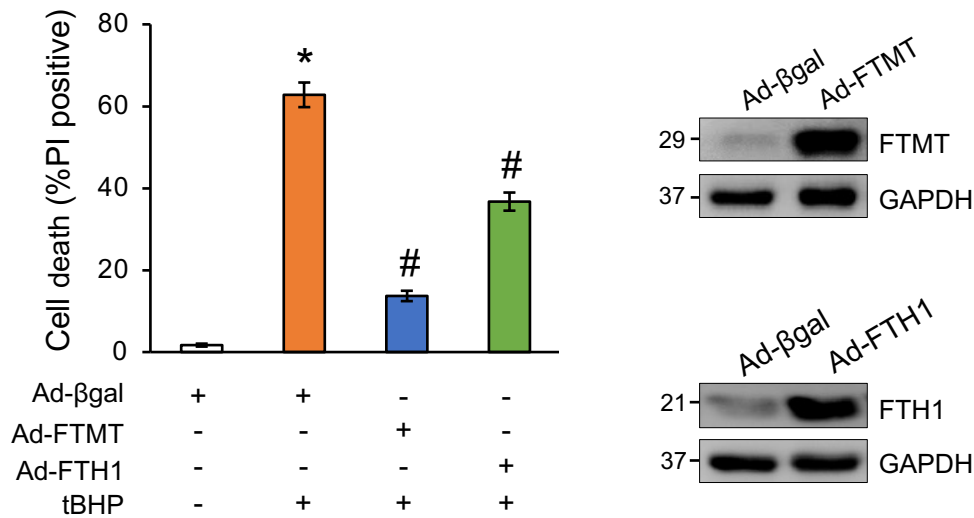
**Supplemental Figure 1. Inactivation of HO-1 reduced tBHP-induced labile iron levels and cell death in cardiomyocytes. A.** Assessment of labile iron pool in neonatal rat cardiomyocytes treated with tBHP in the presence and absence of ZnPP for 8 h. **B.** Quantification of cell death from cells treated as in A for 12 h. \* $P < 0.05$  vs Control; # $P < 0.05$  vs tBHP.  $n = 3$ .

## Supplemental Figure 2



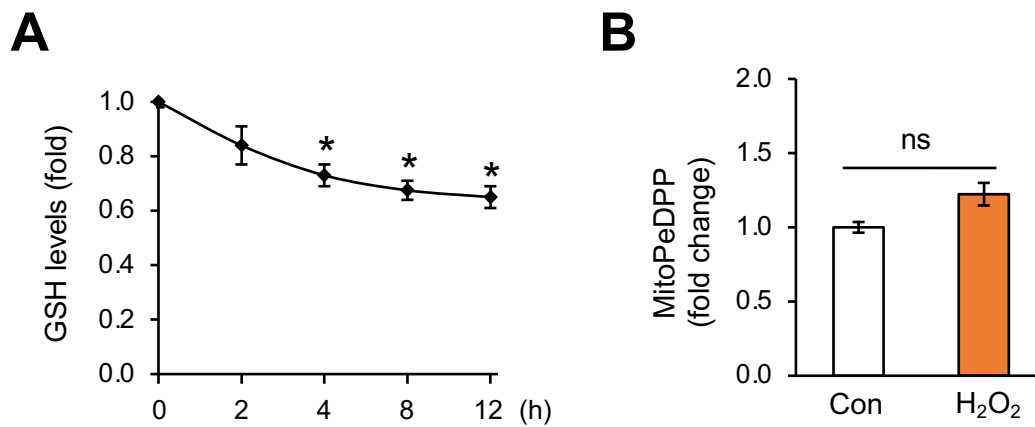
**Supplemental Figure 2. Overexpression of HO-1 promoted tBHP-induced cell death in cardiomyocytes.** **A.** Cell death was assessed from cardiomyocytes infected with Ad-βgal or Ad-HO-1 for 24 h followed by treatment with tBHP or vehicle control for 12 h.  $P < 0.05$  vs Control;  $\#P < 0.05$  vs Ad-βgal + tBHP.  $n = 3$ . **B.** HO-1 expression in cardiomyocytes infected with adenoviral vectors for Bach1 shRNA (Ad-shBach1) or scrambled control (Ad-shScram) for 24 h.  $P < 0.05$  vs Ad-shScram.  $n = 3$ .

**Supplemental Figure 3**



**Supplemental Figure 3. Overexpression of mitochondrial ferritin (FTMT) inhibited tBHP-induced cell death in cardiomyocytes.** Cell death was assessed from cardiomyocytes infected with Ad-βgal, Ad-FTMT, or Ad-FTH1 for 24 h followed by treatment with tBHP or vehicle control for 12 h. Ad-FTH1, adenovirus expressing ferritin heavy chain-1. FTMT and FTH1 expression levels were assessed by Western blotting.  $P < 0.05$  vs Ad-βgal; # $P < 0.05$  vs Ad-βgal + tBHP.  $n = 3$ .

## Supplemental Figure 4



**Supplemental Figure 4. Effect of H<sub>2</sub>O<sub>2</sub> on GSH levels and mitochondrial lipid peroxidation in cardiomyocytes.** **A.** GSH levels in cardiomyocytes treated with 200  $\mu$ M H<sub>2</sub>O<sub>2</sub> for the indicated time periods. \* $P$  < 0.05 vs 0 h. n = 3. **B.** Mitochondrial lipid peroxidation assessed with MitoPeDPP in cardiomyocytes treated with 200  $\mu$ M H<sub>2</sub>O<sub>2</sub> for 8 h. ns, non-significant. n = 3.

Full length blots

Figure 1C

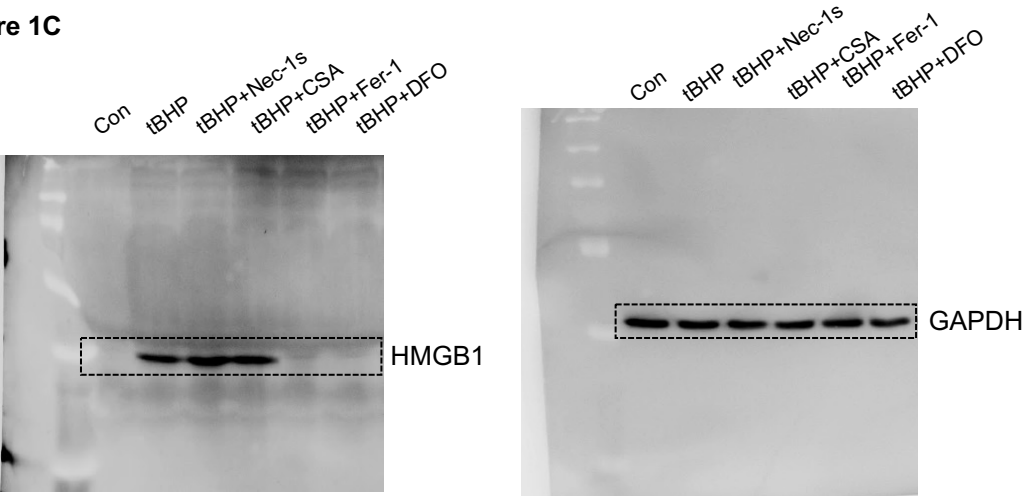


Figure 1F

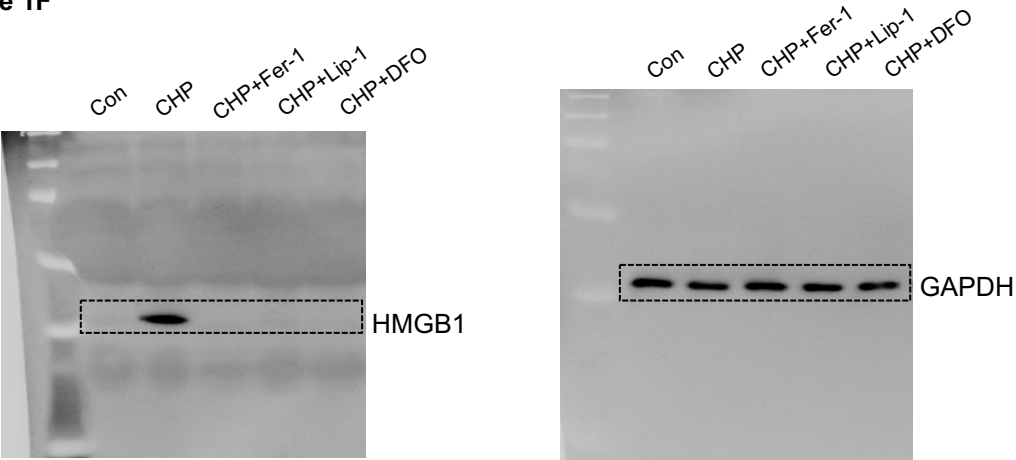
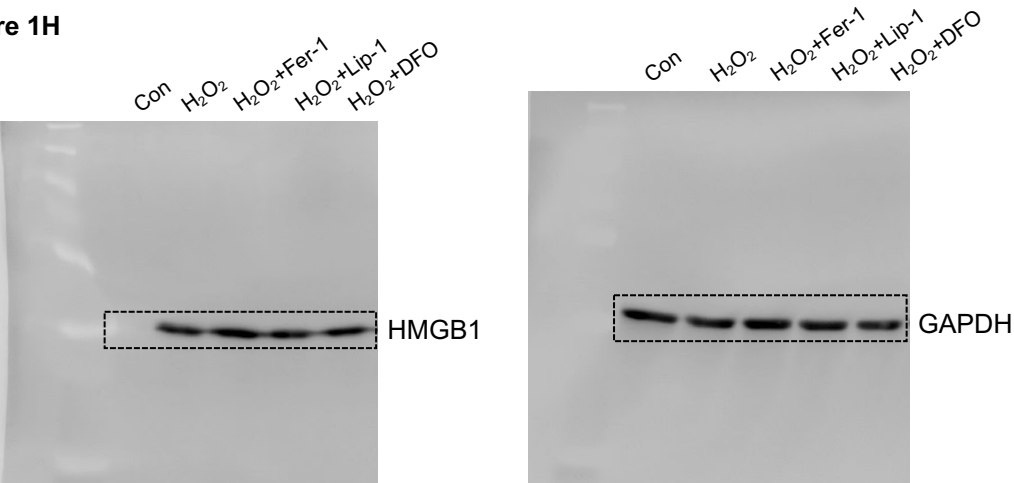
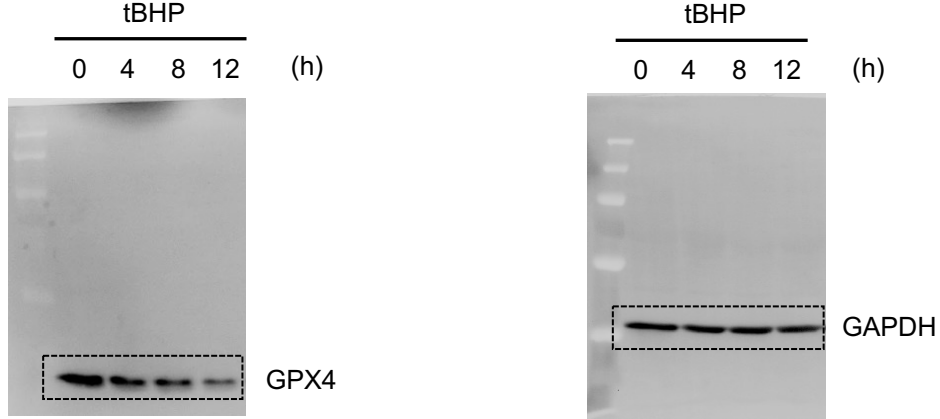


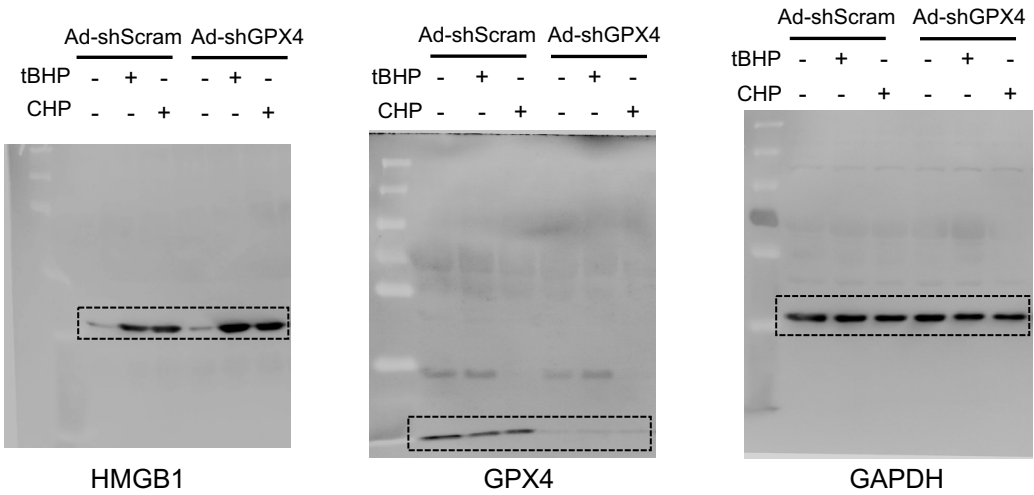
Figure 1H



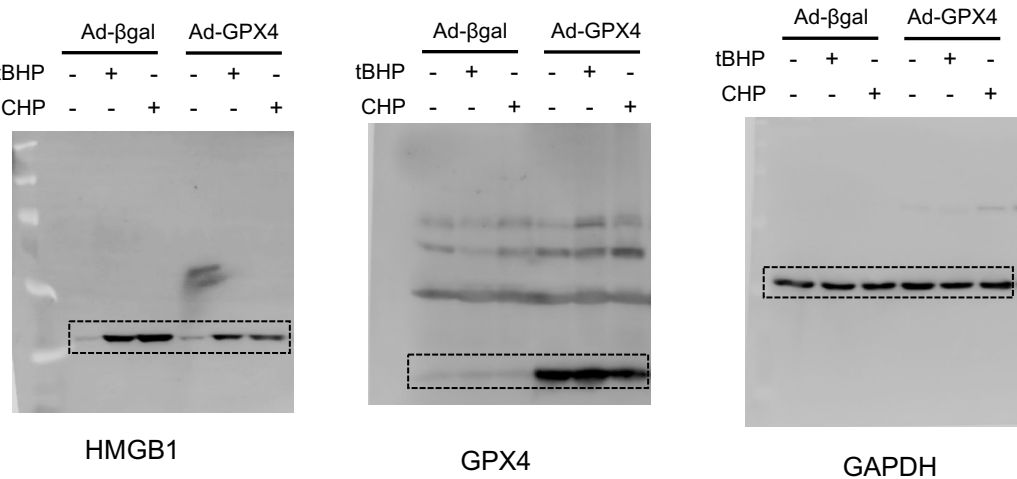
**Figure 2D**



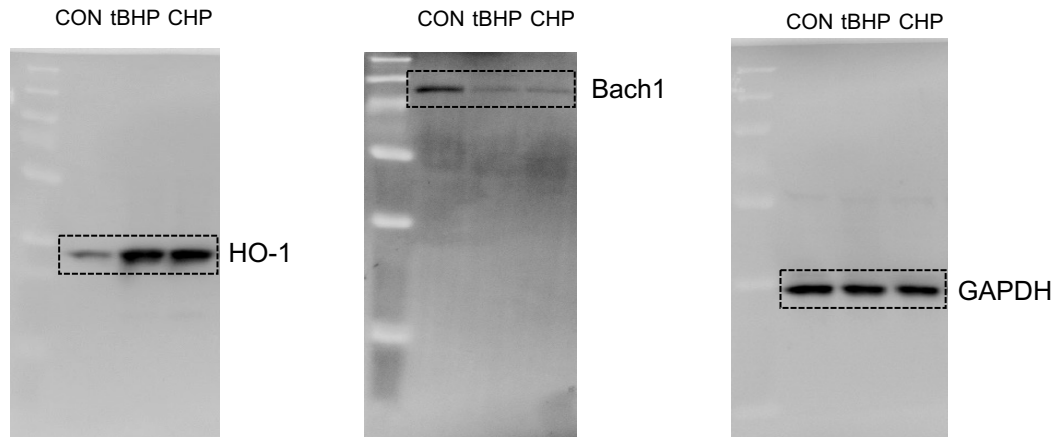
**Figure 2F**



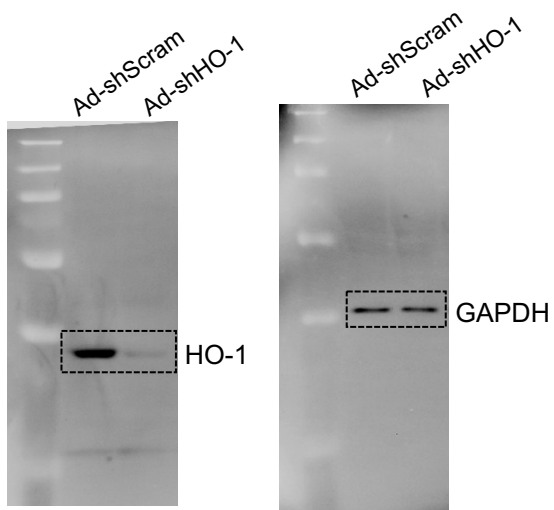
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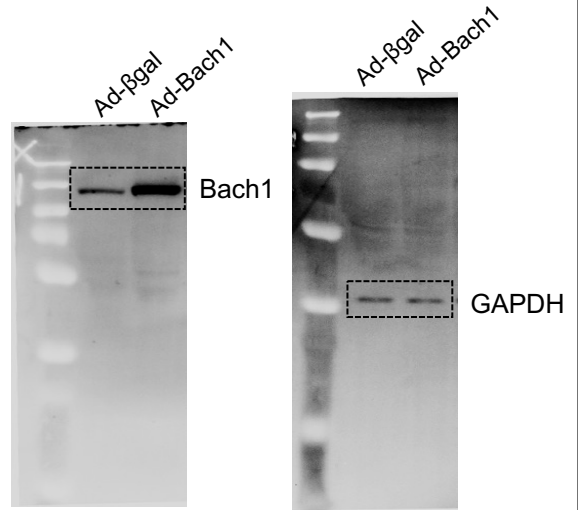
**Figure 3B**



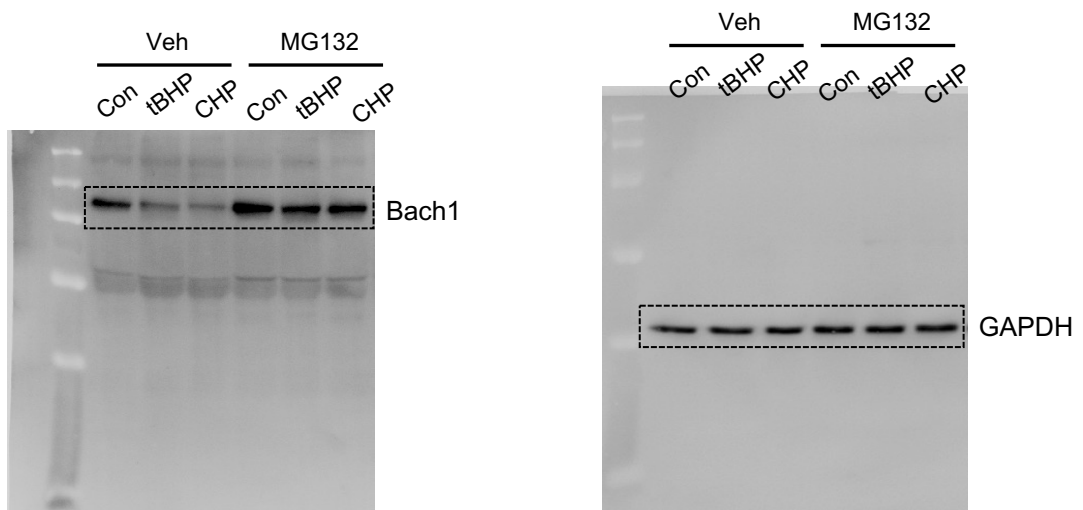
**Figure 3C**



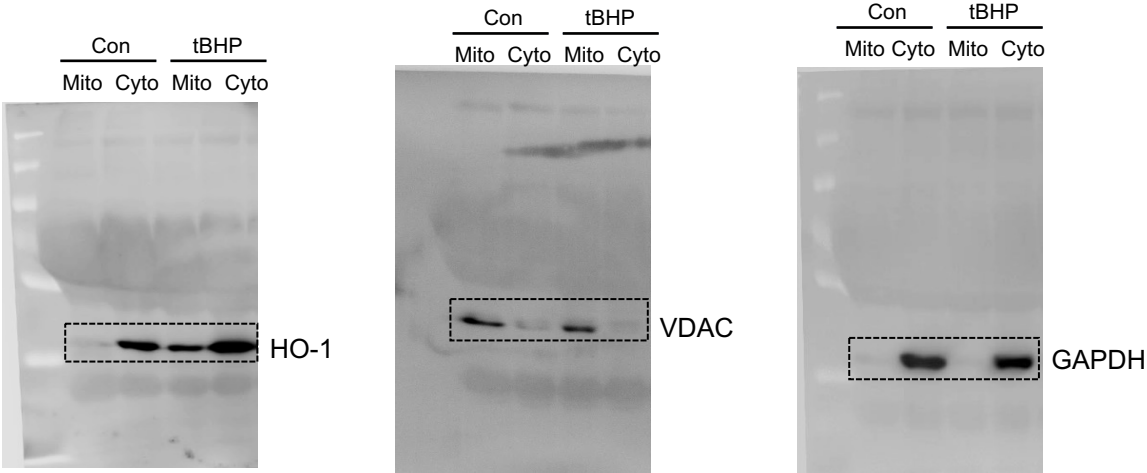
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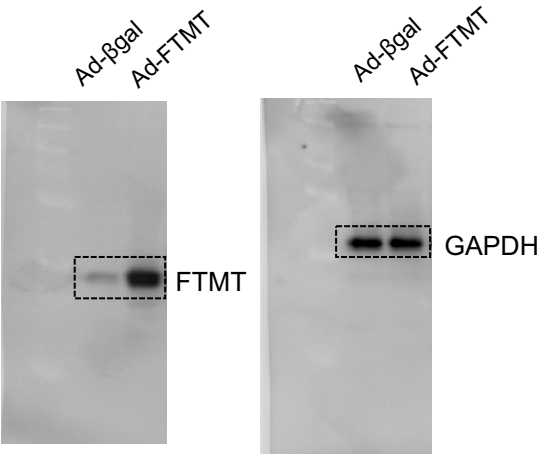
**Figure 3E**



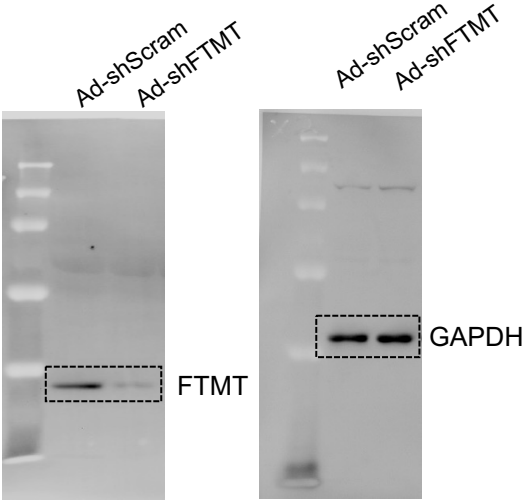
**Figure 4B**



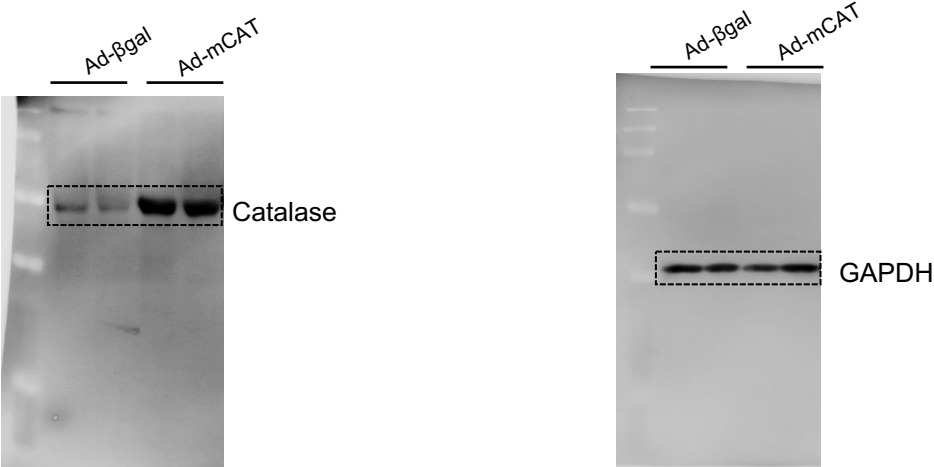
**Figure 4D**



**Figure 4E**

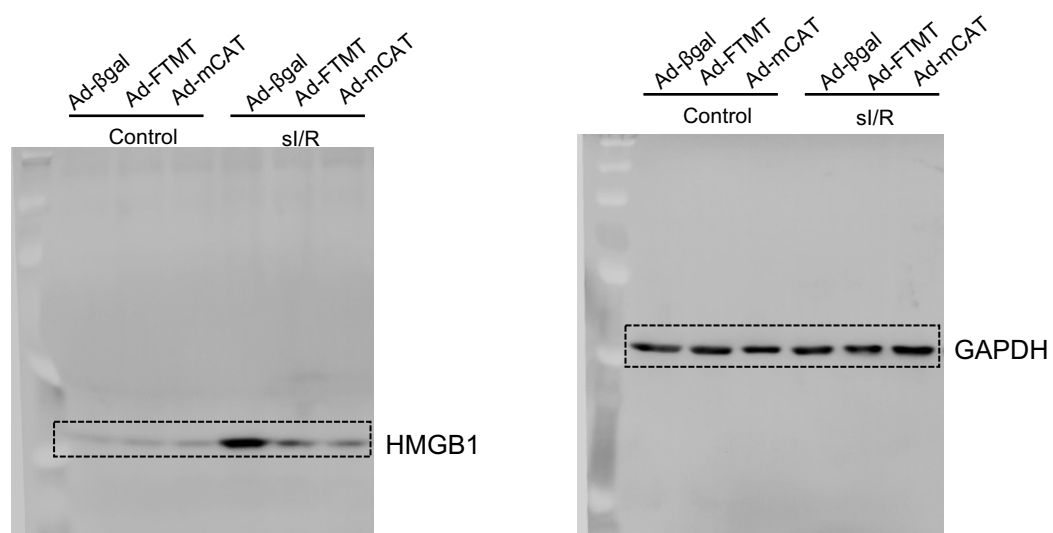


**Figure 5E**

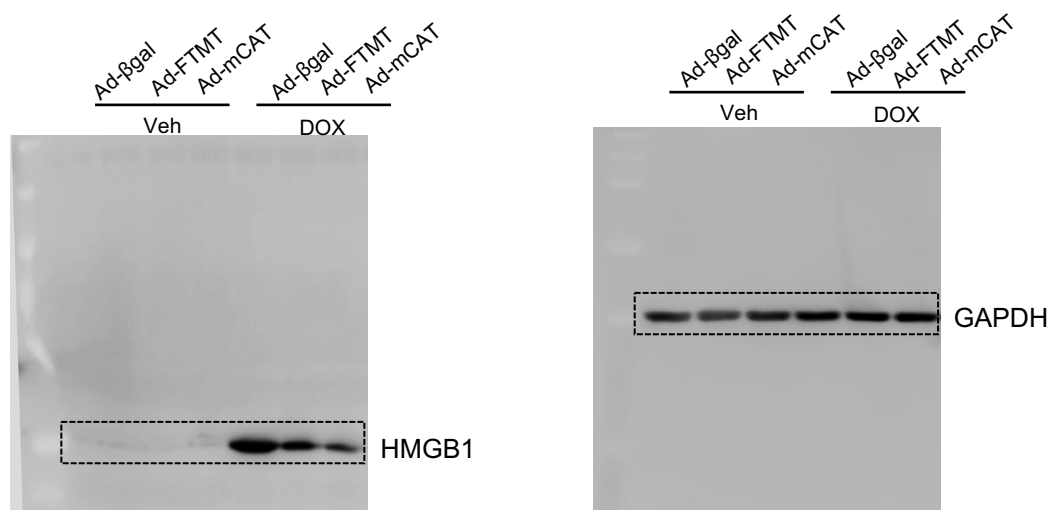




**Figure 6E**



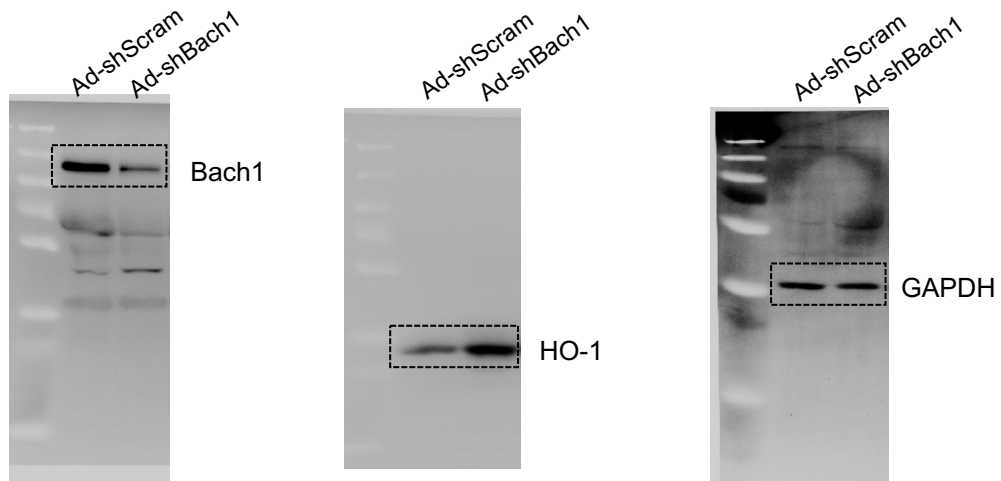
**Figure 6H**



**Suppl. Figure 2A**



**Suppl. Figure 2B**



**Suppl. Figure 3**

