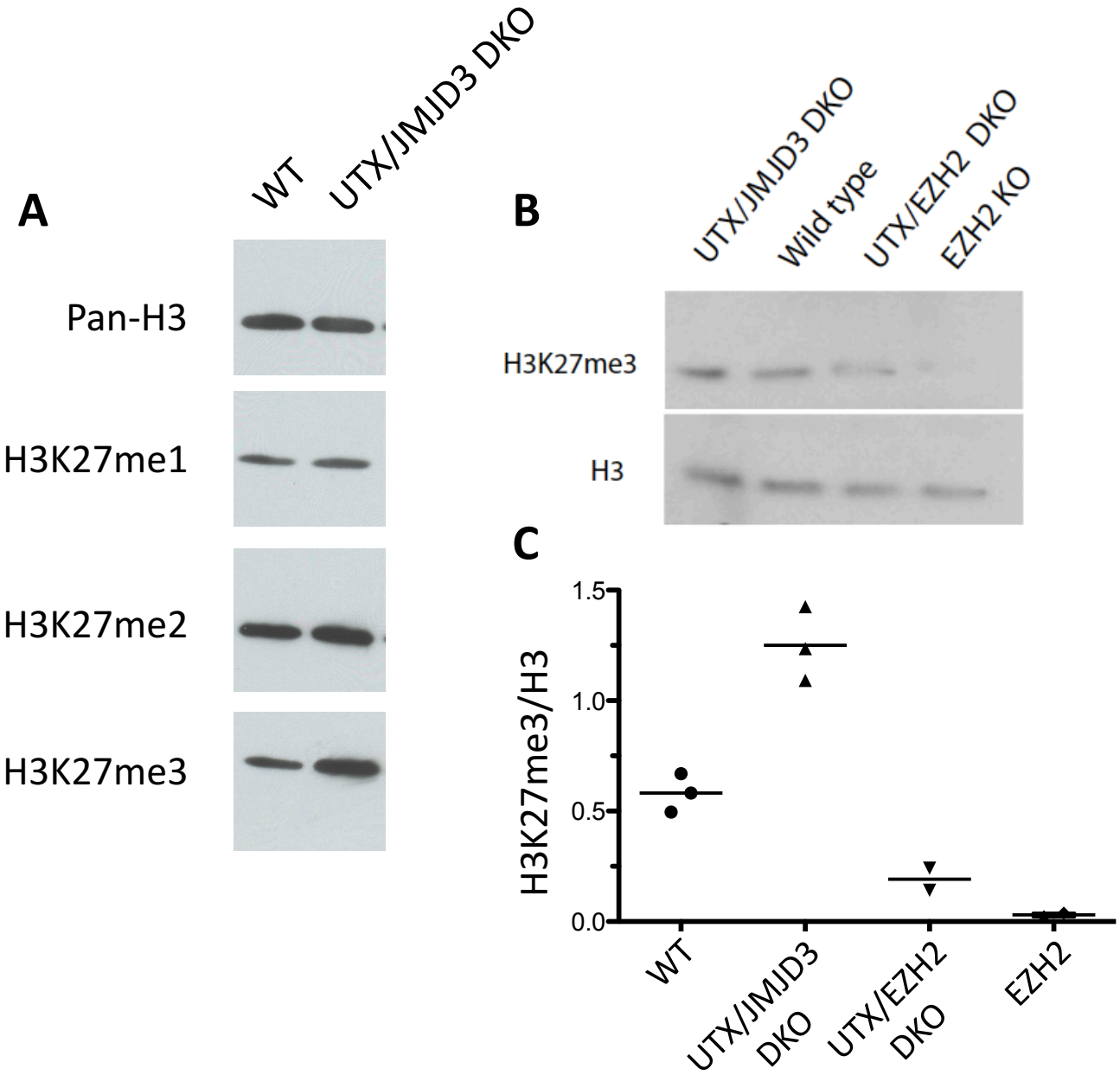Supplemental figure 1