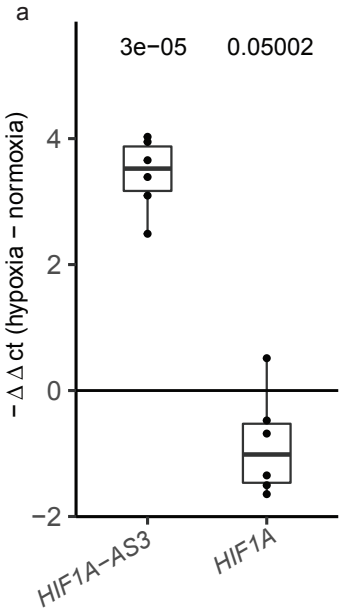Supplementary 2