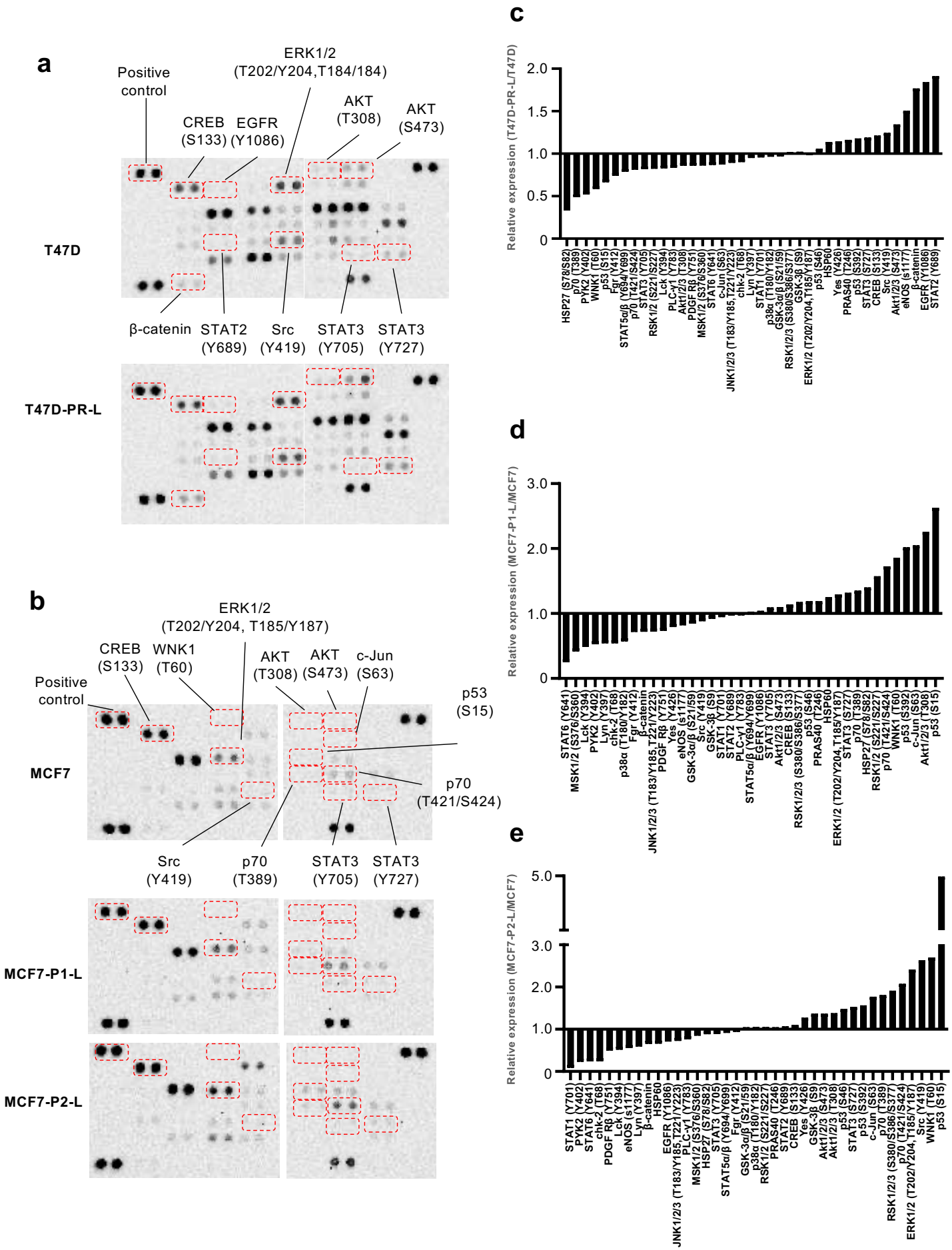Supplementary fig. 2