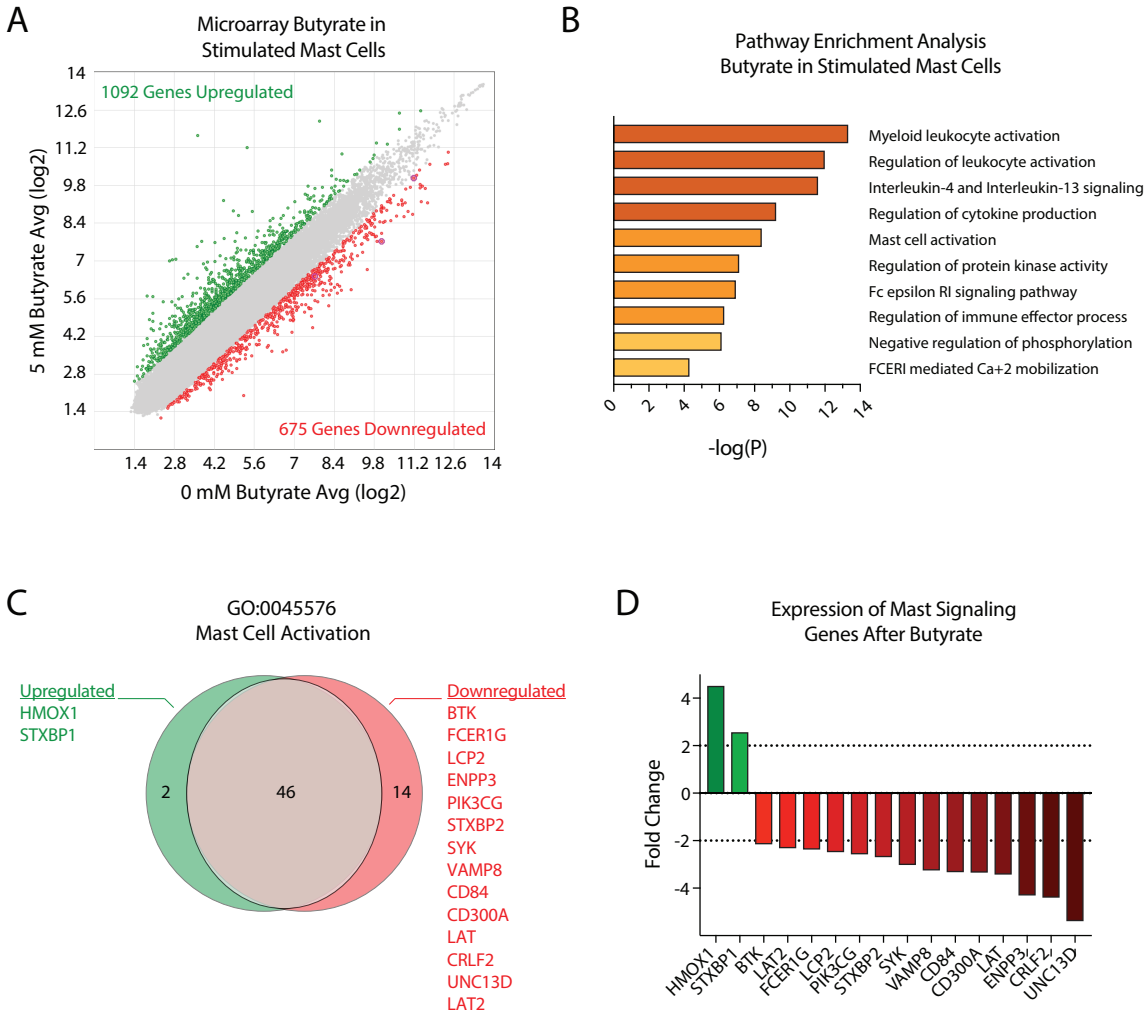Appendix S5 - Folkerts et al. 2019