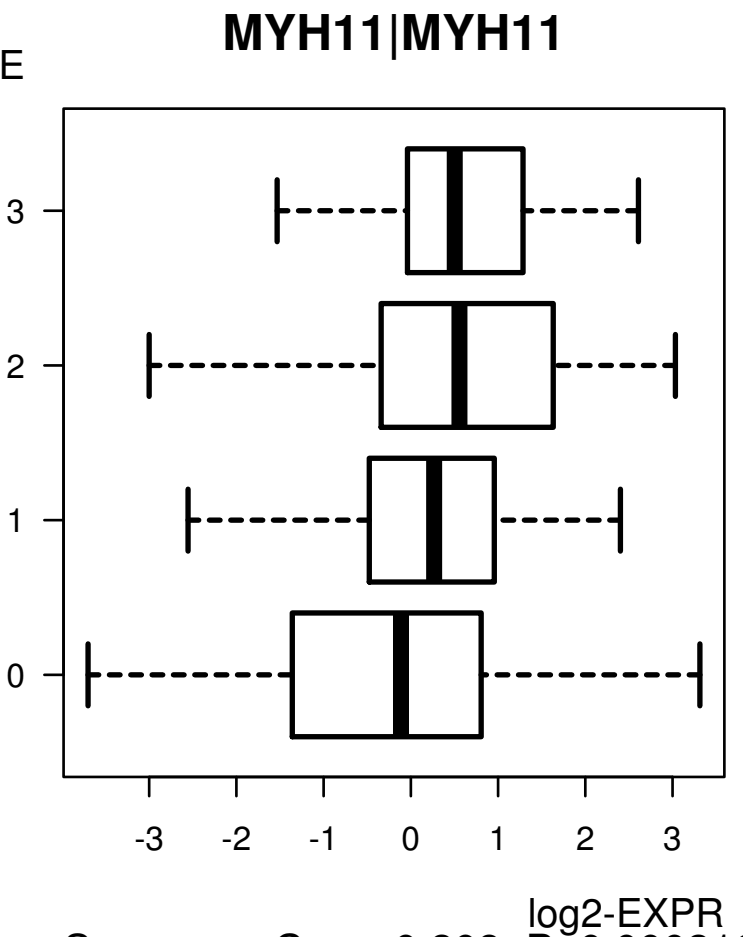THOLOGY_N_STAGE