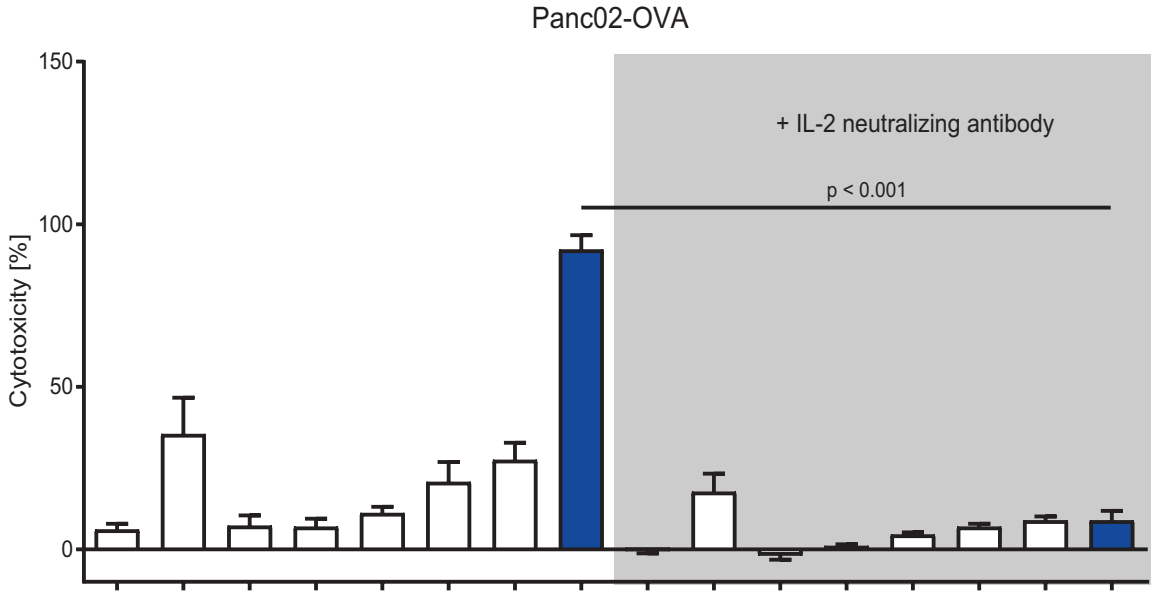Supplementary figure 2