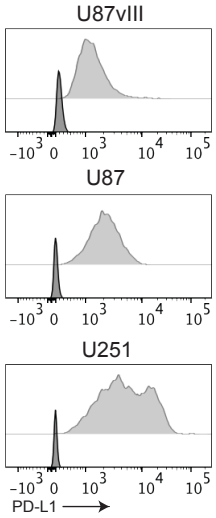SUPPLEMENTARY FIGURE 1