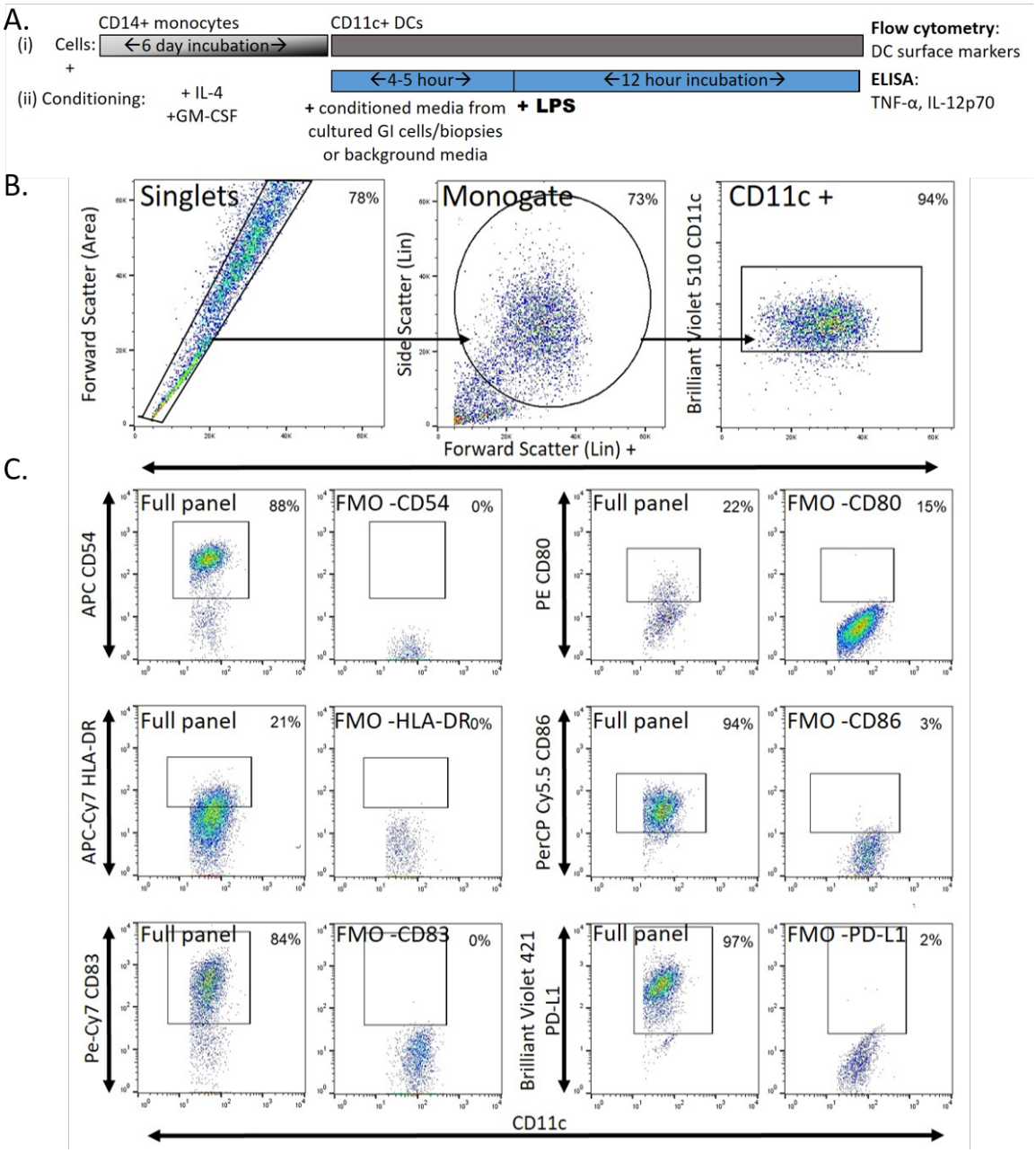SUPPLEMENTARY FIGURE 3