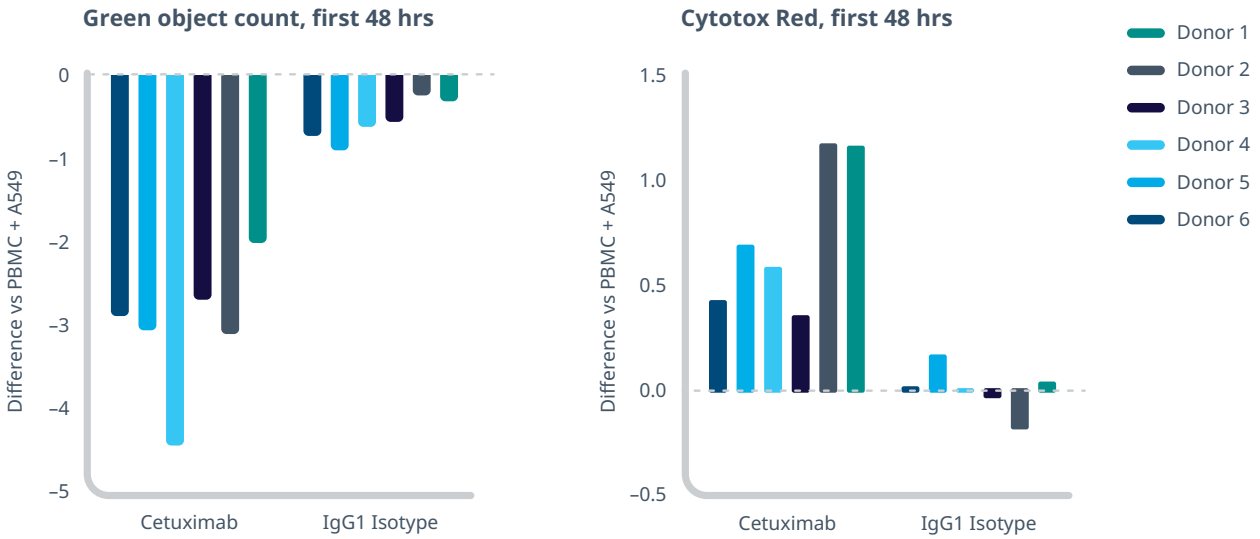
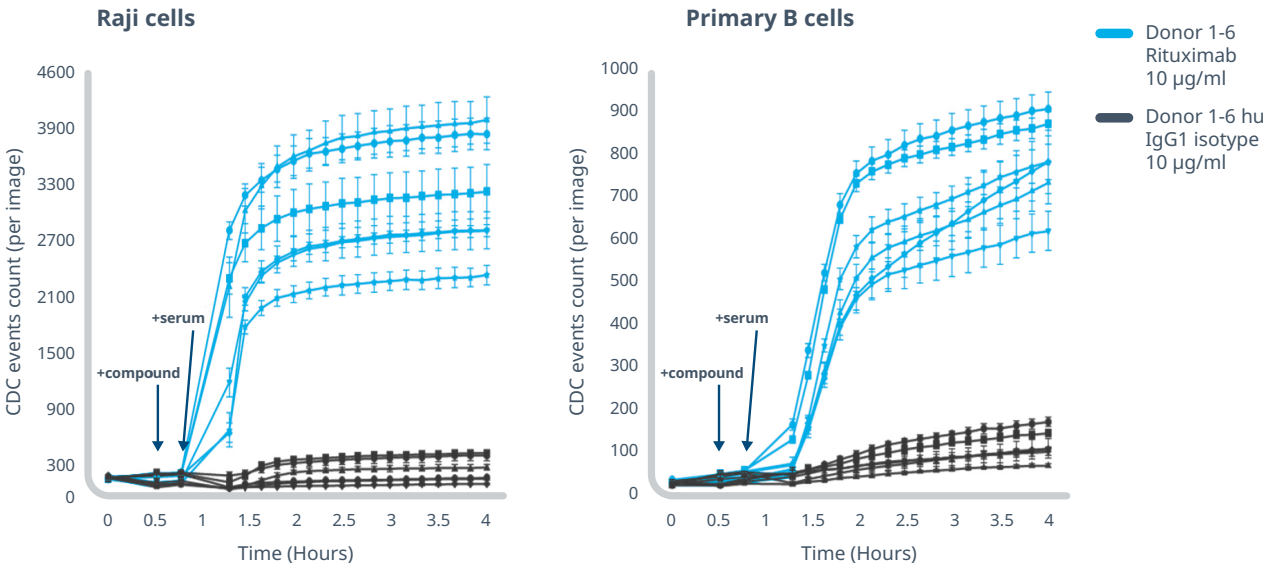
Antibody-dependent cellular cytotoxicity (ADCC) assay



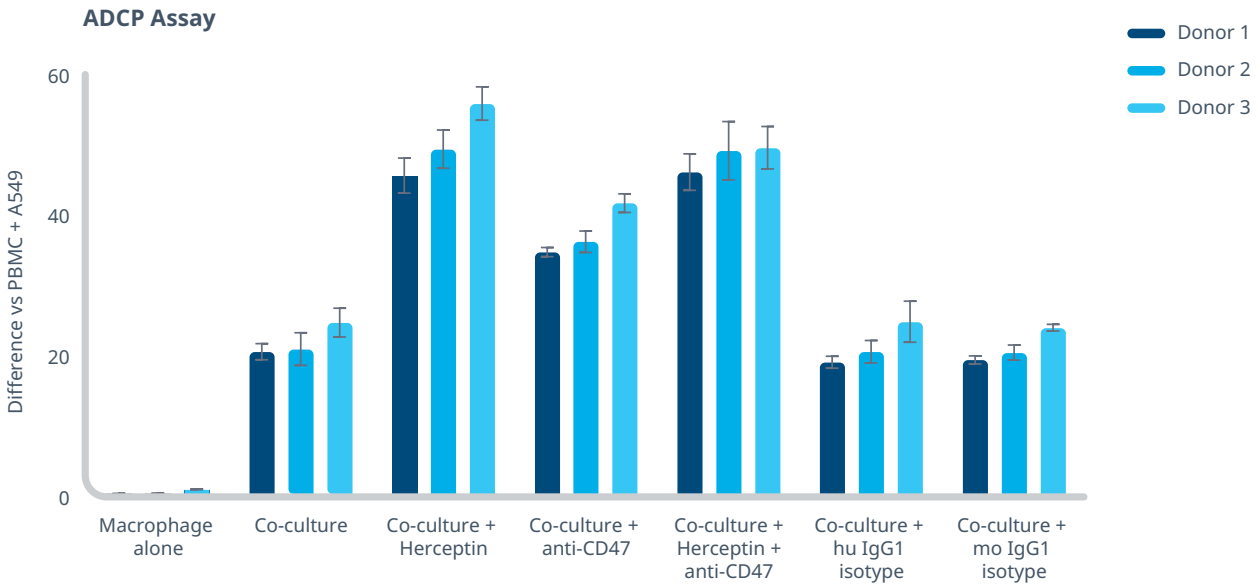
A549 target cells expressing a green fluorescent marker were co-cultured with PBMCs from 6 healthy donors and treated with cetuximab or an IgG1 isotype control in the presence of an Incucyte Cytotox Red Dye. Evaluation of cytotoxicity was performed in a live cell imaging assay by tracking the reduction of green object counts and the red fluorescent signal real-time.

Complement-dependent cytotoxicity (CDC) assay



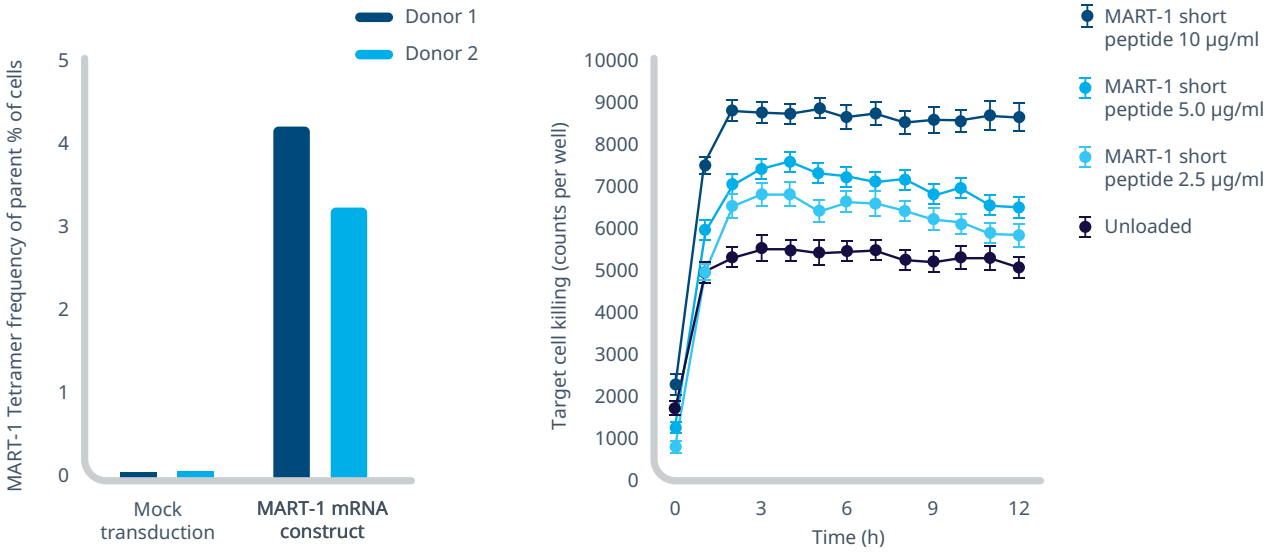
Raji cells and primary B cells (healthy donors) were treated with rituximab or an IgG1 isotype control and serum of 6 healthy donors in the presence of a fluorescent Cytotox dye. Complement-dependent cytotoxicity was evaluated real-time in a live cell imaging assay.

Antibody-dependent cellular phagocytosis (ADCP) assay



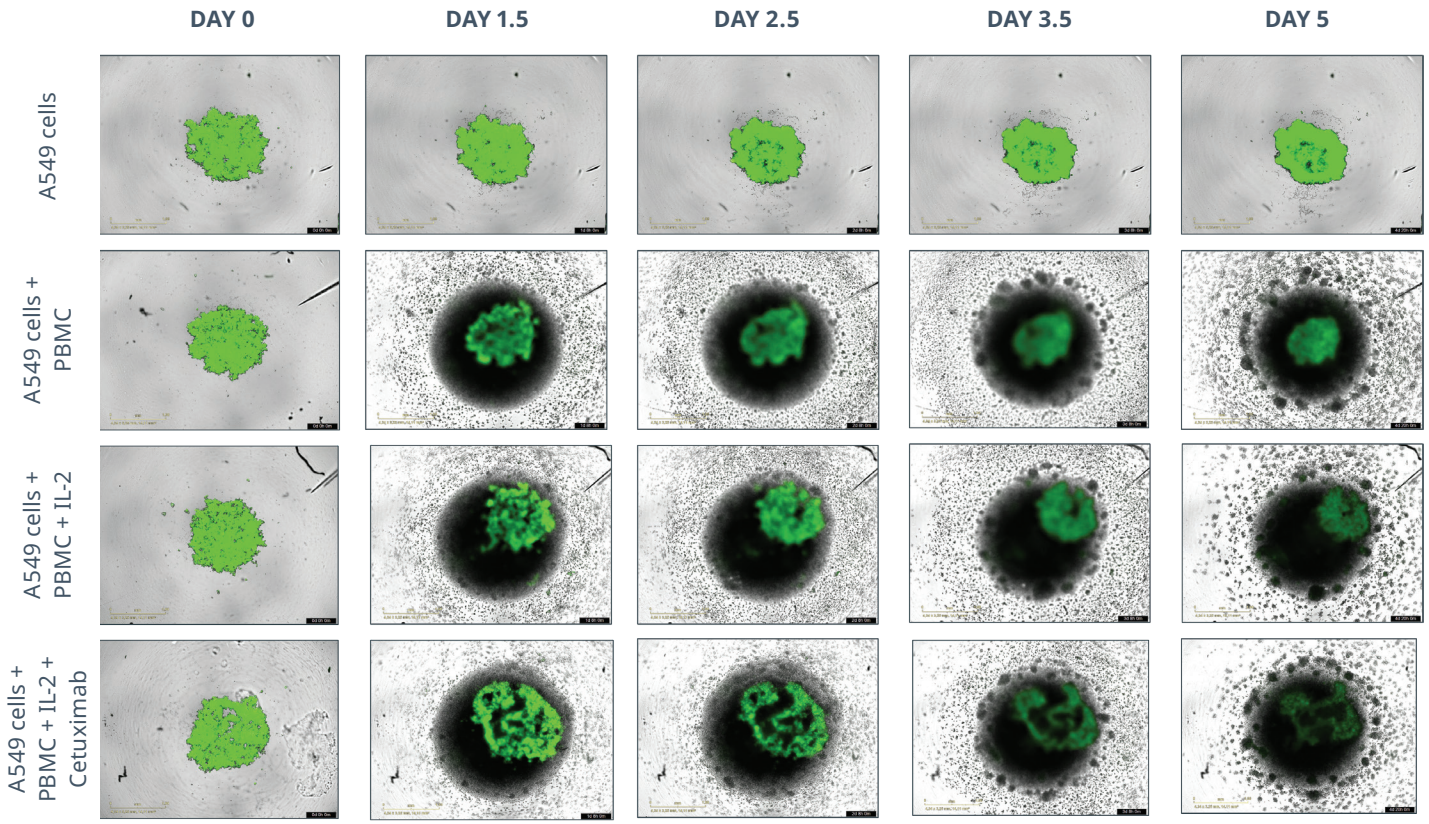
Target cells were labeled with a CellTrace dye and co-cultured with M2-like macrophages from 3 healthy donors. Co-cultures were treated with Herceptin®, anti-CD47, human IgG1, mouse IgG1 or left untreated. Antibody-dependent phagocytosis was evaluated by flow cytometry quantification of the % of CellTrace positive macrophages.

Antigen-specific/recall killing assay



Autologous B cells loaded with MART-1 peptide were co-cultured with in vitro generated MART-1 specific $CD8^+$ T cells. MART-1 specificity was confirmed via a MART-1 tetramer staining. Evaluation of cytotoxicity was performed in a live cell imaging assay by tracking a fluorescent Cytotox dye signal real-time.

3D spheroid killing assay



A549 target cells expressing a green fluorescent marker were seeded at 1 density per well. PBMCs from healthy donors were added after 3 days at 1 effector : target ratio. The co-cultures were treated with IL-2 and cetuximab for 5 days. Evaluation of cytotoxicity was performed in a live cell imaging assay by tracking the total green area signal real-time.