

Immune Cell Products for Research

HIGH VIABILITY AND PURITY CELLS

PICOIMMUNE & IMMUNE CELLS

Founded in 2014 and based in New Jersey, NanoBiotec, LLC (d/b/a PicoImmune) is an immunology, oncology and cell biology company. We dedicate to providing innovative pre-clinical drug discovery and translational assays and solutions with the focus on disease relevant cellular models, enabling technologies and services to the academic, biopharma communities to accelerate the pace of drug discovery. We offer our customers access to high quality primary immune cells, functional immune cell assays and flow cytometric analysis. Immune cells are critical for host defense against a variety of invading pathogens among other functions. Our purified cells are widely utilized in a number of immune functional assays which are often a critical part of assessing immunomodulatory activity and/or potential immunotoxicity of a therapeutic on both innate and adaptive immune systems.

IMMUNE CELL PRODUCTS FROM PICOIMMUNE

- ✓ **A variety of immune cell offerings:** PBMCs, T cells, B cells, Natural killer cells, monocytes, dendritic cells, CD34+ cells and many other types.

- ✓ High viability and purity.
- ✓ Ready-to-use cells with guaranteed concentration or counts
- ✓ Ethically sourced from world renowned blood institutions.
- ✓ Institutional Review Board (IRB)-approved consent forms and protocols.
- ✓ Donors screened for HIV-1, HIV-2, hepatitis B, hepatitis C, human T-lymphotropic virus, syphilis, Chagas, West Nile virus and others.



CELL ISOLATION SERVICES FROM PICOIMMUNE

- ✓ **Rigorous QC Testing:** Ensure reproducible results and eliminate variability.
- ✓ Clients can specify preferred isolation method (positive/negative selection).
- ✓ Well-validated reagents for cell isolation, purity and viability characterization.
- ✓ **State-of-art platforms:** autoMACS Separator, Beckman Coulter CytoFLEX S



flow cytometer.

- ✓ **20+ years of experience:** cell isolation/enrichment/differentiation expertise to deliver high-quality PBMCs and other immune cell subsets
- ✓ Additional characterization available, including HLA typing
- ✓ Variety of animal cell types as well as cell lots from normal, human and disease state donors available upon request

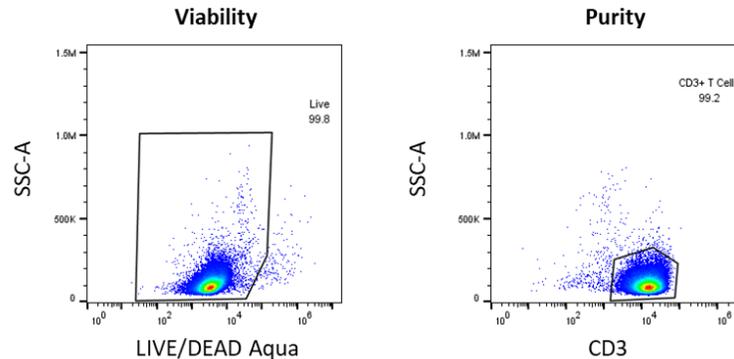
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The isolated cell populations are ideal for researchers looking to perform:

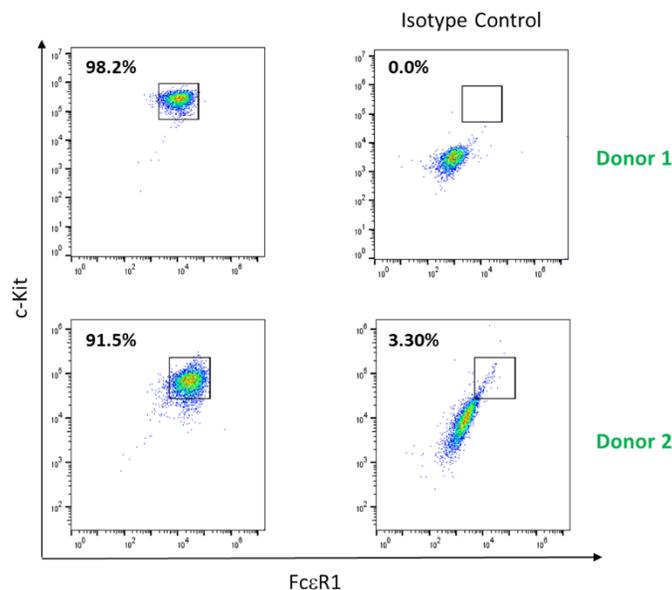
- ✓ Flow cytometry
- ✓ Functional cell-based assays
- ✓ Gene expression analysis
- ✓ Discovery of immunotherapeutic agents

EXAMPLE DATA: FLOW CYTOMETRIC ANALYSIS FOR CELL PURITY

Isolated CD3⁺ T cells from PBMCs using bead-based magnetic-activated cell sorting (MACS)



Primary human mast cells derived from CD34⁺ peripheral blood precursor cells



LIST OF PRIMARY HUMAN IMMUNE CELLS

PICOIMMUNE PRIMARY HUMAN IMMUNE CELL INVENTORY

PBMC	PI-010	Human Normal PBMC	Density Gradient Centrifugation
T Cell	PI-015	Human Normal PB CD3+ Pan T Cells	Negative Selection
	PI-020	Human Normal PB CD3+ Pan T Cells	Positive Selection
	PI-025	Human Normal PB CD3+ $\gamma\delta$ T cells	Negative Selection
	PI-030	Human Normal PB CD4+ T helper Cells	Negative Selection
	PI-035	Human Normal PB CD4+ T helper Cells	Positive Selection
	PI-040	Human Normal PB CD4+CD25+CD127- Treg cells	Negative Selection
	PI-045	Human Normal PB CD4+CD25+CD127- Treg cells	Positive Selection
	PI-050	Human Normal PB CD4+CD45RA+CD45RO- Naïve T Cells	Negative Selection
	PI-055	Human Normal PB CD4+CD45RA+CD45RO- Naïve T Cells	Positive Selection
	PI-060	Human Normal PB CD4+CD45RO+CD45RA- Memory T Cells	Negative Selection
	PI-065	Human Normal PB Th17 Cells	Positive Selection
	PI-070	Human Normal PB CD8+CD45RA+CD45RO- Naïve T Cells	Negative Selection
	PI-075	Human Normal PB CD8+CD45RO+CD45RA- Memory T Cells	Negative Selection
	PI-080	Human Normal CD3+CD56+ Natural Killer T Cells	Positive Selection
	PI-085	Human Normal PB CD8+ Cytotoxic T Cells	Negative Selection
PI-090	Human Normal PB CD8+ Cytotoxic T Cells	Positive Selection	
B Cell	PI-095	Human Normal PB CD27- Naïve B Cells	Negative Selection
	PI-100	Human Normal PB CD27+ Memory B Cells	Positive Selection
	PI-105	Human Normal PB CD19+ B Cells	Negative Selection
	PI-110	Human Normal PB CD19+ B Cells	Positive Selection
NK Cell	PI-115	Human Normal PB CD56+ NK cells	Negative Selection
	PI-120	Human Normal PB CD56+ NK cells	Positive Selection
Monocyte	PI-125	Human Normal PB Pan Monocytes (CD14+, CD16+, CD14+CD16+)	Negative Selection
	PI-130	Human Normal PB CD14-CD16+ Monocytes	Positive Selection
	PI-135	Human Normal PB CD14+CD16- Monocytes	Negative Selection
	PI-140	Human Normal PB CD14+ Monocytes	Positive Selection
Dendritic Cell	PI-145	Human Immature Dendritic Cells	Monocyte-Derived
	PI-150	Human Mature Dendritic Cells	Monocyte-Derived
	PI-155	Human Normal PB Plasmacytoid Dendritic Cells	Positive Selection
	PI-160	Human Normal PB Myeloid Dendritic Cells	Negative Selection
Macrophage	PI-165	Human M1 macrophages	Monocyte-Derived
	PI-170	Human M2a macrophages	Monocyte-Derived
	PI-175	Human M0 macrophages, mixed	Monocyte-Derived
Neutrophil	PI-180	Human Normal PB CD66b+CD16+ Neutrophils	Negative Selection
Mast Cell	PI-185	Human Mast Cells (growing)	CD34+ PB Stem Cell-Derived
	PI-190	Human Mast Cells (cell pellets)	CD34+ PB Stem Cell-Derived
Stem Cell	PI-195	Human Normal PB CD34+ Hematopoietic Stem/Progenitor Cells	Positive Selection

