

## **Analytical Testing Capabilities**

- Automated and high-throughput Cell Count
- Cell viability
- Apoptosis and cell death
- Organelle changes
  - Plasma membrane integrity
  - Mitochondrial membrane potential
  - Lysosomal degradation
  - ROS production
- Transduction and transfection verification
  - Quantification and expression of fluorescent protein
- Vector quantitation and characterization
- Cell proliferation
- Cytotoxicity
- Imaging and counting colonies in hematopoietic colony-forming unit
- Cell sorting (FACS and magnetic)
- PCR
- Protein detection and quantification
  - Cytokine and other secreted protein
  - Phosphoprotein expression
  - Transcription and translation factor changes
- Product identity and characteristics
  - Phenotype
  - Lineage
  - Differentiation
  - Inhibition
  - Activation
  - Exhaustion/Senescence
- Specimen and tissue processing
  - Whole Blood
  - PBMC isolation
  - Apheresis
  - Human/animal tissue
  - Cell lines
- Single cell omics
  - Gene expression
  - Surface protein expression
  - Antigen specificity
- Single cell functional characterization
  - Cytokines, chemokines and growth factors
  - Protein to Protein interaction and resistance pathway