Maxpar Human Acute Myeloid Leukemia (AML) Phenotyping Panel Kit, 15 Marker—25 Tests

Catalog: 201316
Package size: 25 tests

Contents:
- Maxpar® Cell Staining Buffer (500 mL)
- Maxpar Fix and Perm Buffer (25 mL)
- Maxpar Water (500 mL)
- Cell-ID™ Intercalator-Ir (125 µM; 25 µL)
- Maxpar antibodies (see table for panel)*

* The antibodies are provided in individual tubes, not a premixed cocktail.

Technical Information

Description: The Maxpar AML Phenotyping Panel Kit is for the identification and phenotyping of human acute myeloid leukemia (AML). AML, the most common type of acute leukemia in adults, is a malignancy arising within the bone marrow due to a disruption of normal hematopoiesis. AML arises within precursors of myeloid, erythroid, megakaryocytic and monocytic cell lineages due to the acquisition of chromosomal rearrangements and multiple gene mutations. The immunophenotype of AML is highly heterogeneous; markers frequently expressed by AML include CD15, CD33, CD34 and CD64.

Recommended Usage: For staining with the Human AML Phenotyping Panel Kit, cells should be prepared using standard techniques and stained according to the Maxpar Cell Surface Staining Protocol. The kit contains buffers optimized for staining and a nucleic acid intercalator used for single-cell identification. Additional materials and equipment may be required for cell staining and acquisition. Please refer to Maxpar Cell Surface Staining Protocol. Data collection is performed on a CyTOF® mass cytometer.

References


PBMC from a patient with Acute Myeloid Leukemia (AML) were stained with the Maxpar AML Phenotyping Panel Kit. The resultant data was analyzed using viSNE, which projects the multi-dimensional distance between events resolved by the markers in the panel kit into two dimensions (tSNE1 and tSNE2). The viSNE map for viable CD3-CD19- events is shown on the left, heat-mapped for CD34 expression. Further viSNE analysis of the CD34+ AML cells (right) reveals the heterogeneity within AML. Each plot is heat mapped to the indicated marker.