**Protocol CyTOF003.42: Mass Cytometry (CyTOF) Analysis – Wayne State / EPOCH**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Panel** | **Antigen** | **Atomic Symbol** | **Atomic Mass** | **Stock (mg/mL)** | **Final (μg/mL)** | **Vol. per Rxn. (μL)** | **Vol. for Barcode (μL)** | **Vol. for 2 Barcode (μL)** |
| **Surface (Pre-MeOH)** | CD45 | Y | 89 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| CD235ab | In | 113 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| CD61 | In | 113 | 0.2 | 0.5 | 0.25 | 1.4 | 2.8 |
| CD15 | In | 115 | 0.2 | 2 | 1 | 5.5 | 11 |
| CD66b | La | 139 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| CD3 | Pr | 141 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| CD19 | Nd | 142 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| CD45RA | Nd | 143 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| CD4 | Nd | 145 | 0.2 | 2 | 1 | 5.5 | 11 |
| CD8a | Nd | 146 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| GLUT1 | Sm | 147 | 0.2 | 2 | 1 | 5.5 | 11 |
| CPT1a | Nd | 148 | 0.2 | 2 | 1 | 5.5 | 11 |
| TCRγδ | Sm | 152 | 0.2 | 4 | 2 | 11 | 22 |
| FceRIα | Gd | 156 | 0.2 | 0.5 | 0.25 | 1.4 | 2.8 |
| CD161 | Gd | 157 | 0.2 | 4 | 2 | 11 | 22 |
| PD-L1 | Gd | 158 | 0.2 | 4 | 2 | 11 | 22 |
| CRTH2 | Dy | 163 | 0.2 | 4 | 2 | 11 | 22 |
| CD44 | Dy | 164 | 0.2 | 0.5 | 0.25 | 1.4 | 2.8 |
| CD16 | Ho | 165 | 0.2 | 2 | 1 | 5.5 | 11 |
| CD25 | Tm | 169 | 0.2 | 2 | 1 | 5.5 | 11 |
| CXCR4 | Yb | 171 | 0.5 | 4 | 2 | 11 | 22 |
| CD62L | Yb | 172 | 0.2 | 0.25 | 0.125 | 0.7 | 1.4 |
| HLA-DR | Yb | 174 | 0.2 | 2 | 1 | 5.5 | 11 |
| CD14 | Yb | 175 | 0.2 | 4 | 2 | 11 | 22 |
| CD56 | Yb | 176 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| CD63 | Bi | 209 | 0.2 | 0.5 | 0.25 | 1.4 | 2.8 |
|  | **TOTAL** | | | | | | **133.2** | **265.6** |
| **CSM** | | | | | | **196.8** | **394.4** |
| **Master Mix** | | | | | | **330** | **660** |
| **Intracellular (Post-MeOH)** | cPARP | In | 113 | 0.2 | 2 | 1 | 5.5 | 11 |
| total H3 | Ce | 140 | 0.2 | 2 | 1 | 5.5 | 11 |
| VDAC1 | Nd | 144 | 0.2 | 2 | 1 | 5.5 | 11 |
| pCREB | Sm | 149 | 0.2 | 2 | 1 | 5.5 | 11 |
| pSTAT5 | Nd | 150 | 0.2 | 4 | 2 | 11 | 22 |
| pp38 | Eu | 151 | 0.2 | 2 | 1 | 5.5 | 11 |
| pSTAT1 | Eu | 153 | 0.2 | 1 | 0.5 | 2.8 | 5.5 |
| pSTAT3 | Sm | 154 | 0.2 | 4 | 2 | 11 | 22 |
| pS6 | Gd | 155 | 0.2 | 2 | 1 | 5.5 | 11 |
| H3K27me3 | Tb | 159 | 0.2 | 2 | 1 | 5.5 | 11 |
| Tbet | Gd | 160 | 0.2 | 8 | 4 | 22 | 44 |
| Ki67 | Dy | 161 | 0.2 | 2 | 1 | 5.5 | 11 |
| FoxP3 | Dy | 162 | 0.2 | 10 | 5 | 25 | 50 |
| pNFκB | Er | 166 | 0.2 | 2 | 1 | 5.5 | 11 |
| pERK1/2 | Er | 167 | 0.2 | 2 | 1 | 5.5 | 11 |
| pSTAT6 | Er | 168 | 0.2 | 2 | 1 | 5.5 | 11 |
| pPLCg1 | Er | 170 | 0.2 | 4 | 2 | 11 | 22 |
| HK2 | Yb | 173 | 0.2 | 4 | 2 | 11 | 22 |
|  | **TOTAL** | | | | | | **154.3** | **308.5** |
| **CSM** | | | | | | **175.7** | **351.5** |
| **Master Mix** | | | | | | **330** | **660** |

**Barcode Layout:**

**Date:**

Plate 1

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Plate 2

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