

## TECHNICAL DATA SHEET

### CyFlow™ CD158a/g/h Purified Anti-Hu; Clone HP-MA4

**REF** CD698951

**For Research Use Only.**

**Not for use in diagnostic or therapeutic procedures.**

### Specifications

<b>Antigen</b>	CD158a/g/h
<b>Alternative Names</b>	—
<b>Clone</b>	HP-MA4
<b>Clonality</b>	monoclonal
<b>Format</b>	Purified
<b>Host / Isotype</b>	Mouse / IgG2b
<b>Species Reactivity</b>	Human
<b>Negative Species Reactivity</b>	—
<b>Quantity [Concentration]</b>	0.1 mg [ 1 mg/ml ]
<b>Immunogen</b>	Human NK cell line LB2

### Specificity

The mouse monoclonal antibody HP-MA4 recognizes CD158 isoforms KIR2DL1 (CD158a), KIR2DS5 (CD158g), KIR2DS1 (CD158h), and KIR2DS3. It does not recognize the isoforms CD158b1,d,f,i,j.

#### Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)

## Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation

## Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

## Storage and Stability

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	Do not use after expiration date stamped on vial label.

## Background Information

Killer cell immunoglobulin-like receptors (KIRs) are polymorphic transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. They are classified by the number of extracellular immunoglobulin domains (2D or 3D) and by whether they have a long (L) or short (S) cytoplasmic domain. KIR proteins with the long cytoplasmic domain (such as CD158a / KIR2DL1) transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain (such as CD158g / KIR2DS5, CD158h / KIR2DS1, or KIR2DS3) lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for CD158 isoforms are subsets of MHC class I molecules.

## References

- Wiernik A, Foley B, Zhang B, Verneris MR, Warlick E, Gleason MK, Ross JA, Luo X, Weisdorf DJ, Walcheck B, Vallera DA, Miller JS: Targeting natural killer cells to acute myeloid leukemia in vitro with a CD16 x 33 bispecific killer cell engager and ADAM17 inhibition. Clin Cancer Res. 2013 Jul 15; 19(14):3844-55. < PMID: 23690482 >

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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