## **Product Data Sheet**

## **APC/Fire™ 750 anti-human CD158 (KIR2DL1/S1/S3/S5)**

Catalog # / 2297595 / 25 tests

Size: 2297600 / 100 tests

Clone: HP-MA4

Isotype: Mouse IgG2b, κ

Immunogen: Human NK cell clone LB2

Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity

chromatography and conjugated with

APC/Fire™ 750 under optimal

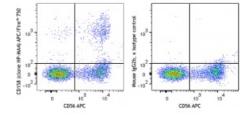
conditions.

Formulation: Phosphate-buffered solution, pH 7.2.

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA)

Lot-specific Concentration:



Human peripheral blood lymphocytes were stained with CD56 APC and CD158 (KIR2DL1/S1/S3/S5) (clone HP-MA4) APC/Fire<sup>™</sup> 750 (left) or mouse IgG2b, κ APC/Fire<sup>™</sup> 750 isotype control (right).

## **Applications:**

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 μL per million cells in 100 μL staining volume or 5  $\mu$ L per 100  $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum

emission of 787 nm.

**Application** Notes: mAb HP-MA4 reacts with KIR2DL1 (CD158a), KIR2DS1 (CD158h), KIR2DS3,

and KIR2DS5 (CD158g).

Additional reported applications include: inhibits NK cell mediated

cytotoxicity and immunoprecipitation.

This clone has been tested in-house and determined to not be suitable for applications in immunohistochemistry of paraffin-embedded tissue sections

(IHC-P).

**Application** References:

1. De Miguel M and M. Lopez-Botet. 2002. Inmunologia. 21:187

2. Goodridge JP, et al. 2013. J. Immunol. 191:3553. PubMed

## **Description:**

CD158 molecules, also known as KIRs (killer cell immunoglobulin-like receptors), are a family of transmembrane proteins with either two (KIR2D) or three (KIR3D) Ig-like extracellular domains. Some KIRs with long cytoplasmic domains contain ITIMs and posses inhibitory functions and others with short cytoplasmic region lack ITIM and have activation functions. 14 polymorphic KIR genes have been reported in humans. CD158 is mainly expressed on a subset of NK cells and a small population of CD8+ T cells. HLA-C is the ligand of CD158a/h.

**Antigen** References:

1. Zola H, et al. eds. 2007. Leukocyte and Stromal Cell Molecules:The CD Markers. Wiely-Liss A John Wiley & Sons Inc, Publication