

## ARG44057 anti-CD158a + CD158g CD158h antibody [HP-MA4] (PE-Cyanine 7)

Package: 100 tests  
Store at: 4°C

### Summary

Product Description	PE-Cyanine 7-conjugated Mouse Monoclonal antibody recognizes CD158a + CD158g CD158h
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The mouse monoclonal antibody HP-MA4 recognizes an extracellular epitope of CD158 isoforms KIR2DL1 (CD158a), KIR2DS5 (CD158g), KIR2DS1 (CD158h), and KIR2DS3. It does not recognize the isoforms CD158b1,d,f,i,j.
Host	Mouse
Clonality	Monoclonal
Clone	HP-MA4
Isotype	IgG2a
Target Name	CD158a + CD158g+ CD158h
Species	Human
Immunogen	Human NK cell line LB2
Conjugation	PE-Cyanine 7
Alternate Names	KIR2DL1; Killer Cell Immunoglobulin Like Receptor, Two Ig Domains And Long Cytoplasmic Tail 1; CD158A ; KIR2DS5; Killer Cell Immunoglobulin Like Receptor, Two Ig Domains And Short Cytoplasmic Tail 5; CD158G; KIR2DS1; Killer Cell Immunoglobulin Like Receptor, Two Ig Domains And Short Cytoplasmic Tail 1; CD158H

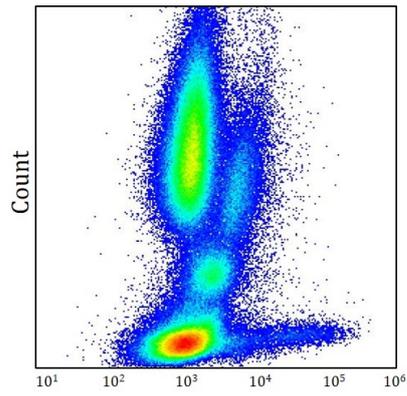
### Application Instructions

Application table	Application	Dilution
	FACS	10 µl / 10 <sup>6</sup> cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Gene Symbol	KIR2DL1; KIR2DS5; KIR2DS1
Gene Full Name	Killer Cell Immunoglobulin Like Receptor, Two Ig Domains And Long Cytoplasmic Tail 1; Killer Cell Immunoglobulin Like Receptor, Two Ig Domains And Short Cytoplasmic Tail 5; Killer Cell Immunoglobulin Like Receptor, Two Ig Domains And Short Cytoplasmic Tail 1
Background	<p>Killer cell immunoglobulin-like receptors (KIRs) are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous and they are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte receptor complex (LRC). The gene content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (KIR3DL3, KIR3DP1, KIR3DL4, KIR3DL2). The KIR proteins 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 transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for several KIR proteins are subsets of HLA class I molecules; thus, KIR proteins are thought to play an important role in regulation of the immune response.</p> <p>Killer cell immunoglobulin-like receptors (KIRs) are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous and they are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte receptor complex (LRC). The gene content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (KIR3DL3, KIR3DP1, KIR3DL4, KIR3DL2). The KIR proteins 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 transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for several KIR proteins are subsets of HLA class I molecules; thus, KIR proteins are thought to play an important role in regulation of the immune response.</p> <p>Killer cell immunoglobulin-like receptors (KIRs) are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous and they are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte receptor complex (LRC). The gene content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (KIR3DL3, KIR3DP1, KIR3DL4, KIR3DL2). The KIR proteins 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 transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for several KIR proteins are subsets of HLA class I molecules; thus, KIR proteins are thought to play an important role in regulation of the immune response.</p>
Function	<p>Receptor on natural killer (NK) cells for some HLA-C alleles such as w4 and w6. Inhibits the activity of NK cells thus preventing cell lysis.</p> <p>Receptor functions are attenuated even lost in some alleles, such as KIR2DS5*002 represented in this entry.</p> <p>Receptor on natural killer (NK) cells for some HLA-C alleles such as w6. Does not inhibit the activity of NK cells.</p>
PTM	Disulfide bond, Glycoprotein
Cellular Localization	Cell membrane, Membrane



ARG44057 anti-CD158a + CD158g CD158h antibody [HP-MA4] (PE-Cyanine 7) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG44057 anti-CD158a + CD158g CD158h antibody [HP-MA4] (PE-Cyanine 7) at  $10 \mu\text{l} / 10^6$  cells dilution.