OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

SM2036RT Monoclonal Antibody to CD158 / KIR2D - PE

Alternate names: CD158a, CD158b, CD158i, KI2DL1, KILLER CELL Immunoglobin-Like Receptors, KIR2DL3, KIR2DS4

Quantity: 25 Tests

Background: KIR2D family members are cell surface glycoproteins with two Ig domains, which are expressed on natural killer cells and some T cells.

Host / Isotype: Mouse / IgG1

Recommended Isotype Controls: SM10R (for use in human samples)

Clone: NKVFS1

Format:
State: Lyophilized purified IgG fraction.
Purification: Affinity Chromatography on Protein G
Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide, 5% Sucrose and 1% BSA
Label: PE – R. Phycoerythrin (RPE)
Reconstitution: SM2036R: Restore with 1 ml distilled water.
SM2036RT: Restore with 0.25 ml distilled water.

Applications:
Flow Cytometry: Use 10 µl of neat antibody to label 10e6 cells in 100 µl.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:
This antibody recognizes KIR2D members of the killer cell immunoglobulin (Ig)-like receptor (KIR) family, CD158a, CD158b and P50.3.
Clone NKVFS1 specifically recognizes the long and short forms CD158a and CD158b (KIR2DL, KIR2DS1 and KIR2DS2 respectively) and also p50.3 (KIR2DS4). The clone is reported to have functional activity, activating NK cell cytotoxicity via KIR2DS and inhibiting via KIR2DL forms. We recommend the use of SM2036A for this purpose.
Species: Human.
Other species not tested.

Storage:
Prior to and following reconstitution store the antibody at 2-8°C.
DO NOT FREEZE!
This product is photosensitive and should be protected from light.
Shelf life: one year from despatch.

General Readings:
1. Spaggiari GM, Contini P, Carosio R, Arvigo M, Ghio M, Oddone D, et al. Soluble HLA class I molecules induce natural killer cell apoptosis through the engagement of CD8: evidence for a negative regulation exerted by members of the inhibitory receptor superfamily. Blood. 2002 Mar 1;99(5):1706-14. PubMed PMID: 11861287.
2. Spaggiari GM, Contini P, Dondero A, Carosio R, Puppo F, Indiveri F, et al. Soluble HLA class I induces NK cell apoptosis upon the engagement of killer-activating HLA class I receptors through FasL-Fas interaction. Blood. 2002 Dec 1;100(12):4098-107. Epub 2002 Jul 18. PubMed PMID: 12393468.
3. Older Aguilar AM, Guethlein LA, Adams EJ, Abi-Rached L, Moesta AK, Parham P. Coevolution of killer cell Ig-like receptors with HLA-C to become the major variable

regulators of human NK cells. J Immunol. 2010 Oct 1;185(7):4238-51. doi: 10.4049/jimmunol.1001494. Epub 2010 Aug 30. PubMed PMID: 20805421.

Pictures:

Staining of Human peripheral blood lymphocytes with Mouse Anti Human KIR antibody RPE conjugated (SM2036R).