HLA-E Monoclonal Antibody (3D12HLA-E), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	3D12HLA-E
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_1210774

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	-
Flow Cytometry (Flow)	1 µg/test	4 Publications
Immunoprecipitation (IP)	Assay-Dependent	-
Neutralization (Neu)	-	1 Publication

Product Specific Information

Description: The monoclonal antibody 3D12 (HLA-E) recognizes human HLA-E, a member of the Human Leukocyte Antigen family. HLA-E is a MHC Class IB member, which has a specialized role in NK cell recognition. Binding of a restricted set of peptides derived from other Class I leader sequences to the HLA-E and B2M (beta2 microglobulin) complex leads to interaction with NKG2A on NK cells. This binding protects the HLA-G-expressing cell from NK cell killing. HLA-E expression is ubiquitous.

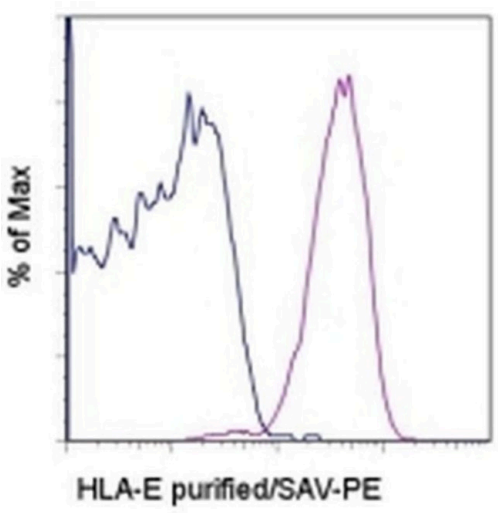
Applications Tested: This 3D12 (HLA-E) antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For HLA-E Monoclonal Antibody (3D12HLA-E), eBioscience™



HLA-E Antibody (14-9953-82) in Flow
Staining of normal human peripheral blood cells with 0.5 µg of Mouse IgG1 K Isotype Control Purified (Product # 14-4714-82) (open histogram) or 0.5 µg of Anti-Human HLA-E Purified (filled histogram) followed by Anti-Mouse IgG Biotin (Product # 13-4013-85)and Streptavidin PE (Product # 12-4317-87).Cells in the lymphocyte gate were used for analysis.

5 References

Flow Cytometry (4)

Cancer immunology, immunotherapy : CII

High-efficiency lysis of cervical cancer by allogeneic NK cells derived from umbilical cord progenitors is independent of HLA status.

"14-9953 was used in Flow cytometry/Cell sorting to provide a rationale to initiate a clinical trial for cervical cancer with adoptively transferred allogeneic NK cells, employing either UCB-NK or PBNK + CET for EGFR-expressing tumors."

Authors: Veluchamy JP,Heeren AM,Spanholtz J,van Eendenburg JD,Heideman DA,Kenter GG,Verheul HM,van der Vliet HJ,Jordanova ES,de Gruijl TD

Year
2017

Species
Human

Journal of immunology (Baltimore, Md. : 1950)

EBV BILF1 evolved to downregulate cell surface display of a wide range of HLA class I molecules through their cytoplasmic tail.

"14-9953 was used in Flow cytometry/Cell sorting to show that the cytoplasmic C-terminal tail of EBV BILF1 is required for reducing surface HLA class I expression."

Authors: Griffin BD,Gram AM,Mulder A,Van Leeuwen D,Claas FH,Wang F,Ressing ME,Wiertz E

Year
2013

Species
Human

View more Flow references on thermofisher.com

Neutralization (1)

Nature biotechnology

HLA-E-expressing pluripotent stem cells escape allogeneic responses and lysis by NK cells.

Authors: Gornalusse GG,Hirata RK,Funk SE,Riolobos L,Lopes VS,Manske G,Prunkard D,Colunga AG,Hanafi LA,Clegg DO,Turtle C,Russell DW

Year
2017

Species
Human

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