

# 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

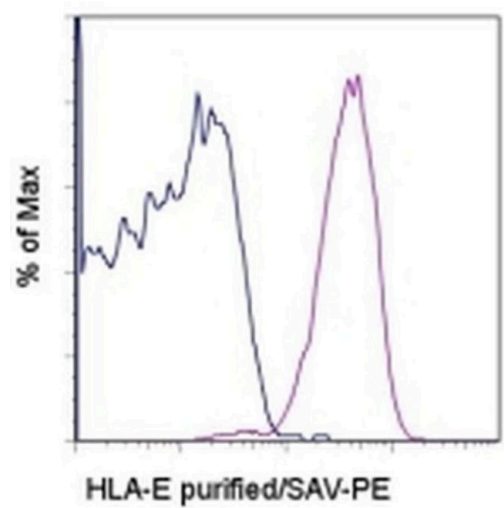
**Description:** The monoclonal antibody 3D12 (HLA-E) recognizes human HLA-E, a member of the Human Leukocyte Antigen family. HLA-E is a MHC Class IB member, which has a specialized role in NK cell recognition. Binding of a restricted set of peptides derived from other Class I leader sequences to the 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<sup>5</sup> to 10<sup>8</sup> 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.



**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)

<p>Cancer immunology, immunotherapy : CII</p> <p><b>High-efficiency lysis of cervical cancer by allogeneic NK cells derived from umbilical cord progenitors is independent of HLA status.</b></p> <p>"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."</p> <p>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</p>	<p>Year 2017</p> <p>Species Human</p>
<p>Journal of immunology (Baltimore, Md. : 1950)</p> <p><b>EBV BILF1 evolved to downregulate cell surface display of a wide range of HLA class I molecules through their cytoplasmic tail.</b></p> <p>"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."</p> <p>Authors: Griffin BD,Gram AM,Mulder A,Van Leeuwen D,Claas FH,Wang F,Ressing ME,Wiertz E</p>	<p>Year 2013</p> <p>Species Human</p>

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Neutralization (1)

<p>Nature biotechnology</p> <p><b>HLA-E-expressing pluripotent stem cells escape allogeneic responses and lysis by NK cells.</b></p> <p>Authors: Gornalusse GG,Hirata RK,Funk SE,Riolobos L,Lopes VS,Manske G,Prunkard D,Colunga AG,Hanafi LA,Clegg DO,Turtlet C,Russell DW</p>	<p>Year 2017</p> <p>Species Human</p>
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