

HLA-E recombinant antibody

Anti-HLA-E [3D12], Rabbit IgG, kappa

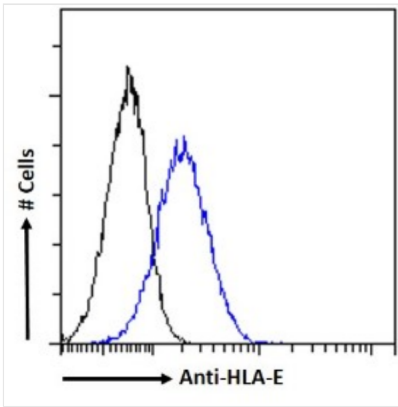
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72555	Rabbit	Human	Immunofluorescence, Functional Assay, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

HLA-E; Monoclonal Recombinant Antibody; Anti-HLA-E [3D12]; Rabbit IgG; kappa; HLA-E; sHLA-E; HLA-6.2; HLA class I histocompatibility antigen alpha chain E; Major histocompatibility complex class I E; MHC; MHC class I antigen E; MHC HLA E alpha 1; MHC HLA E alpha 2.1; HLAB; HLA-B; HLA-C; HLAC; HLA-E recombinant antibody

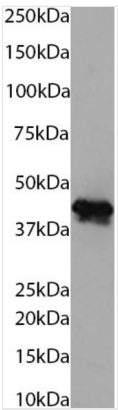
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG kappa
Clone Number	3D12
Specificity	This antibody binds an extracellular epitope on the human HLA-E, a member of human leukocyte antigen family. This antibody is capable of reacting with free HLA-E heavy chain as well as heavy chain associated with b2-microglobulin and peptide. This antibody is reported to cross react with HLA-B and HLA-C but not with HLA-A, HLA-F or HLA-G. The human HLA-E is a non-classical MHC class 1B molecule involved in immune self-nonself discrimination. HLA-E plays a very important role in cell recognition by NK cells. Peptide-bound HLA-E-B2M heterotrimeric complex primarily functions as a ligand for natural killer (NK) cell inhibitory receptor KLRD1-KLRC1, enabling NK cells to monitor the expression of other MHC class I molecules in healthy cells and to tolerate self.
Purity/Purification	Protein A affinity purified
Form/Format	PBS with 0.02% Proclin 300.
Concentration	1mg/ml (varies by lot)
Applicable Applications for HLA-E recombinant antibody	IF (Immunofluorescence), FA (Functional Assay), FCM/FACS (Flow Cytometry)
Preparation and Storage	Store at 4 degree C for up to 3 months. For longer storage, aliquot and store at -20 degree C.



FCM/FACS (Flow Cytometry)
Flow cytometry using anti-HLA-E antibody 3D12 (AAA72555). A431 cells were stained with the anti-unknown specificity antibody or the rabbit IgG version of 3D12 (AAA72555, blue line) at a dilution of 1:100 for 1 h at RT. After washing, the bound antibody was detected using a goat anti-rabbit IgG Alexa Fluor 488 antibody at a dilution of 1:1000, and the cells were analyzed using a FACSCanto flow-cytometer.

IF (Immunofluorescence)
Immunofluorescence staining of A431 cells with anti-HLA-E antibody 3D12 (AAA72555). Immunofluorescence images (left, top-bottom, AAA72555, DAPI, merge).



WB (Western Blot)
Western blot using anti-HLA-E antibody 3D12 (AAA72555). A431 cell lysate (35 µg protein in RIPA buffer) was resolved via SDS-PAGE, and the subsequent blot was probed with the chimeric rabbit version of 3D12 (AAA72555) at 1 µg/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1 hour was used, and proteins were detected by chemiluminescence.

IF (Immunofluorescence)
Immunofluorescence staining of A431 cells with anti-HLA-E antibody 3D12 (AAA72555). Immunofluorescence images (right, top-bottom, AAA72555, DAPI, merge).

ADDITIONAL INFORMATION

Related Product Information for HLA-E recombinant antibody	The original antibody was generated by immunizing HLA-B27 transgenic mice with recombinant human HLA-E purified from AEH cells (Lymphoblastoid cell line LCL 721.221 cells transfected with HLA-E gene).
References	Lee et al. HLA-E surface expression depends on binding of TAP-dependent peptides derived from certain HLA class I signal sequences. J Immunol. 1998 May 15;160(10):4951-60. N/A9590243 Note on publication: This paper evaluates the regulation of surface expression of HLA-E by signal peptides using antibodies.

NCBI AND UNIPROT INFORMATION

NCBI GI #	62912479
NCBI GeneID	3133
NCBI Accession #	NP_005507.3
NCBI GenBank Nucleotide #	NM_005516.5
UniProt Accession #	P13747; P01889; P10321
Molecular Weight	40,157 Da
NCBI Official Full Name	HLA class I histocompatibility antigen, alpha chain E

NCBI Official Synonym Full Names	major histocompatibility complex, class I, E
NCBI Official Symbol	HLA-E
NCBI Official Synonym Symbols	MHC; QA1; EA1.2; EA2.1; HLA-6.2
NCBI Protein Information	HLA class I histocompatibility antigen, alpha chain E; HLA class I histocompatibility antigen, E alpha chain; MHC HLA-E alpha-1; MHC HLA-E alpha-2.1; MHC class I antigen E; lymphocyte antigen
UniProt Protein Name	HLA class I histocompatibility antigen, alpha chain E
UniProt Gene Name	HLA-E
UniProt Synonym Gene Names	HLA-6.2; HLAE
UniProt Entry Name	HLAE_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/monoclonal/hla-e-recombinant-antibody-clone-3d12-immunofluorescence-functional-assay-flow-cytometry-elisa/72555>