Datasheet for ABIN94354

anti-HLA-E antibody

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Overview

Quantity:	0.1 mg
Target:	HLA-E
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This HLA-E antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunoprecipitation (IP), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Bacterially expressed recombinant HLA-E refolded with beta2-microglobulin and peptide.
Clone:	MEM-E-06
Isotype:	IgG1
Specificity:	The antibody MEM-E/06 recognizes an extracellular epitope on native surface-expressed HLA-E, but not denaturated heavy chain of HLA-E. HLA-E belongs to the MHC Class I molecules (MHC Class Ib, nonclassical) and it is expressed on many types of the human cells. The published results showed that the antibody cross-reacts with some classical MHC Class I molecules (HLA-A3, -A11, -B7). However, the recent Workshop I Session on the 3rd International Conference on HLA-G (Paris, July 2003) confirmed that the antibody exhibits much broader cross-reactivity classical MHC Class I antigens, namely with HLA-A24, -A32, -B8, -B15, -B27, -B35, -B44, -B54, -C3, -C4, -C5, -C7.

Product Details

Cross-Reactivity (Details):	Human, Non-Human Primates
Purification:	Purified by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)

Target Details

Target:	HLA-E
Alternative Name:	HLA-E (HLA-E Products)
Background:	Major histocompatibility complex, class I, E,HLA-E (human leukocyte antigen E) is a non-classical MHC I antigen, which is important for dialogue with NK cells and their regulation through interaction with CD94/NKG2 receptor. Like other MHC I molecules, transmembrane HLA-E molecule (45 kDa) associates with beta2 microglobulin. Unlike HLA-G, expression of HLA-E molecules is not so restricted, but it has been detected at least at mRNA level in virtually all cells and tissues examined. In peripheral blood, HLA-E protein is expressed at least in all mononuclear cells, but in different quantity (B cells and monocytes more than T cells and NK cells).,HLA class I histocompatibility antigen, alpha chain E, MHC class I antigen E
Gene ID:	3133
UniProt:	P13747
Pathways:	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

Application Details

Application Notes:	Immunohistochemistry (paraffin sections): Recommended dilution: 10 µg/mL, positive tissue: spleen. Flow cytometry: Recommended dilution: 1-4 µg/mL
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Handling Advice:	**Do not freeze.**
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

Product cited in:

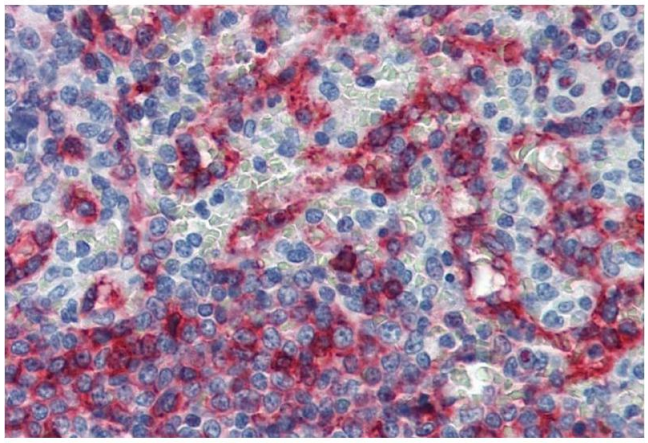
Das, Long: "Lytic granule polarization, rather than degranulation, is the preferred target of inhibitory receptors in NK cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 185, Issue 8, pp. 4698-704, (2010) (PubMed).

Dambaeva, Bondarenko, Grendell, Kravitz, Durning, Golos: "Non-classical MHC-E (Mamu-E) expression in the rhesus monkey placenta." in: **Placenta**, Vol. 29, Issue 1, pp. 58-70, (2008) (PubMed).

Gonen-Gross, Achdout, Arnon, Gazit, Stern, Horejsí, Goldman-Wohl, Yagel, Mandelboim: "The CD85J/leukocyte inhibitory receptor-1 distinguishes between conformed and beta 2-microglobulin-free HLA-G molecules." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 175, Issue 8, pp. 4866-74, (2005) (PubMed).

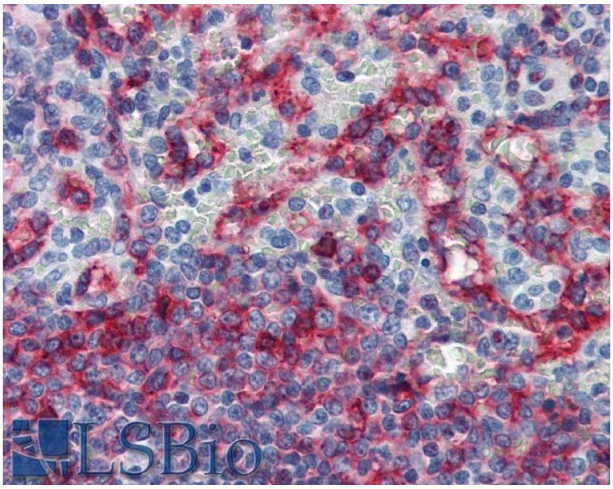
Palmisano, Contardi, Morabito, Gargaglione, Ferrara, Pistillo: "HLA-E surface expression is independent of the availability of HLA class I signal sequence-derived peptides in human tumor cell lines." in: **Human immunology**, Vol. 66, Issue 1, pp. 1-12, (2004) (PubMed).

Menier, Saez, Horejsi, Martinozzi, Krawice-Radanne, Bruel, Le Danff, Reboul, Hilgert, Rabreau, Larrad, Pla, Carosella, Rouas-Freiss: "Characterization of monoclonal antibodies recognizing HLA-G or HLA-E: new tools to analyze the expression of nonclassical HLA class I molecules." in: **Human immunology**, Vol. 64, Issue 3, pp. 315-26, (2003) (PubMed).



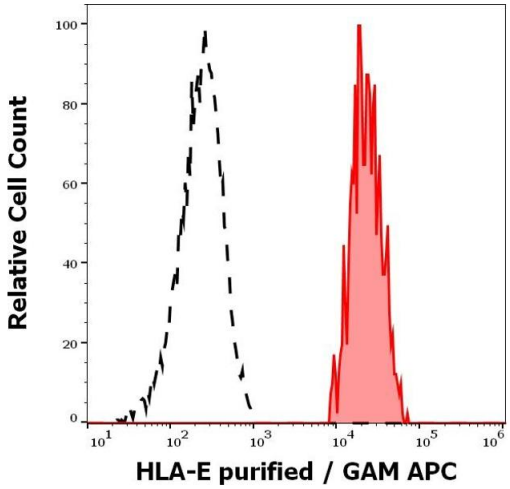
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Immunohistochemistry staining of human spleen (paraffin sections) with anti-HLA-E (clone MEM-E/06).



Immunohistochemistry

Image 2. Immunohistochemistry staining of human spleen (paraffin sections) with anti-HLA-E (clone MEM-E/06). Commercially tested by LifeSpan BioSciences.



Flow Cytometry

Image 3. Separation of human monocytes (red-filled) from HLA-E negative blood debris (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-HLA-E (MEM-E/06) purified antibody (concentration in sample 0,56 µg/mL, GAM APC).

Please check the product details page for more images. Overall 4 images are available for ABIN94354.