



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## Anti-HLA-E [3D12] Standard Size Ab03740-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted human IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgG1 format, created for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG1, Fc Silent™, Kappa

**Clone Number:** 3D12

**Alternative Name(s) of Target:** 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

**UniProt Accession Number of Target Protein:** P13747; P01889; P10321

**Published Application(s):** functional assay, FC, IF

**Published Species Reactivity:** Human

**Immunogen:** 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).

**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-nonsel self 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.

**Application Notes:** The biotin conjugated version of this antibody was used for the study of HLA-E expression and distribution on PBMCs using flow cytometry. This antibody was also used in an assay to study the effect of HLA-E on inhibition of NK-mediated cytotoxicity LCL .221 cell line. The presence of 3D11 the resulted in complete restoration of lysis (PMID: 9560253). It was reported that binding of this antibody to HLA-E is inhibited by the peptides sequences 115QFAYDYGKDY123 and 137DTAAQI142. It was also reported that this antibody is capable of binding several HLA-Ia antigens like HLA-B and HLA-C (PMID: 21145594). This antibody was used in a study to determined the surface expression of HLA-E in human

tumors using immunofluorescent staining and flow cytometry (PMID: 12618909).

**Antibody First Published in:** 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.

[PMID:9590243](#)

**Note on publication:** This paper evaluates the regulation of surface expression of HLA-E by signal peptides using antibodies.

## Product Form

**Size:** 100 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.