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HLA-E Antibody, Biotin conjugated

Product Code	CSB-PA320269LD01HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P13747
Immunogen	Recombinant Human HLA class I histocompatibility antigen, alpha chain E protein (33-261AA)
Raised In	Rabbit
Species Reactivity	Human
Tested Applications	ELISA
Relevance	Non-classical major histocompatibility class Ib molecule involved in immune self- nonself discrimination. In complex with B2M/beta-2-microglobulin binds nonamer self-peptides derived from the signal sequence of classical MHC class la molecules (VL9 peptides) (PubMed:9754572, PubMed:18083576, PubMed:18339401). 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 (PubMed:9754572, PubMed:9486650, PubMed:17179229, PubMed:18083576). Upon cellular stress, preferentially binds signal sequence-derived peptides from stress- induced chaperones and is no longer recognized by NK cell inhibitory receptor KLRD1-KLRC1, resulting in impaired protection from NK cells (PubMed:12461076). Binds signal sequence-derived peptides from non- classical MHC class Ib HLA-G molecules and acts as a ligand for NK cell activating receptor KLRD1-KLRC2, likely playing a role in the generation and effector functions of adaptive NK cells and in maternal-fetal tolerance during pregnancy (PubMed:9754572, PubMed:30134159). Besides self-peptides, can also bind and present pathogen-derived peptides conformationally similar to VL9 peptides to alpha-beta T cell receptor (TCR) on unconventional CD8+ cytotoxic T cells, ultimately triggering antimicrobial immune response (PubMed:16474394, PubMed:30087334).
Form	Liquid
Conjugate	Biotin
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	Antigen Affinity Purified
Isotype	IgG
Clonality	Polyclonal
Alias	HLA class I histocompatibility antigen, alpha chain E (MHC class I antigen E), HLA-E, HLA-6.2 HLAE
Species	Human

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Research Area	Immunology
Target Names	HLA-E