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Anti-HLA-C Reference Antibody (Janssen patent anti-HLA-C)

Catalog # APR11361

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P10321
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4SP-opti-FALA
Calculated MW	40649

Additional Information

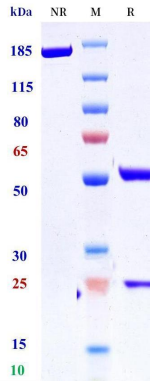
Target/Specificity	HLA-C
Expression system	CHO

Protein Information

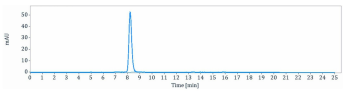
Name	HLA-C (HGNC:4933)
Synonyms	HLAC
Function	Antigen-presenting major histocompatibility complex class I (MHCI) molecule with an important role in reproduction and antiviral immunity (PubMed:11172028, PubMed:20104487, PubMed:20439706, PubMed:20972337, PubMed:24091323, PubMed:28649982, PubMed:29312307). In complex with B2M/beta 2 microglobulin displays a restricted repertoire of self and viral peptides and acts as a dominant ligand for inhibitory and activating killer immunoglobulin receptors (KIRs) expressed on NK cells (PubMed:16141329). In an allogeneic setting, such as during pregnancy, mediates interaction of extravillous trophoblasts with KIR on uterine NK cells and regulate trophoblast invasion necessary for placentation and overall fetal growth (PubMed:20972337, PubMed:24091323). During viral infection, may present viral peptides with low affinity for KIRs, impeding KIR-mediated inhibition through peptide antagonism and favoring lysis of infected cells (PubMed:20439706). Presents a restricted repertoire of viral peptides on antigen-presenting cells for recognition by alpha-beta T cell receptor (TCR) on HLA-C-restricted CD8-positive T cells, guiding antigen-specific T cell immune response to eliminate infected cells, particularly in chronic viral infection settings such as HIV-1 or CMV infection (PubMed:11172028, PubMed:20104487, PubMed:28649982). Both the peptide and the MHC molecule are recognized by TCR, the peptide is responsible for the fine specificity of antigen recognition and MHC residues account for the MHC restriction of T cells (By similarity). Typically presents intracellular

	peptide antigens of 9 amino acids that arise from cytosolic proteolysis via proteasome. Can bind different peptides containing allele-specific binding motifs, which are mainly defined by anchor residues at position 2 and 9. Preferentially displays peptides having a restricted repertoire of hydrophobic or aromatic amino acids (Phe, Ile, Leu, Met, Val and Tyr) at the C-terminal anchor (PubMed:25311805, PubMed:8265661).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass membrane protein
Tissue Location	Ubiquitous. Highly expressed in fetal extravillous trophoblasts in the decidua basalis (at protein level)

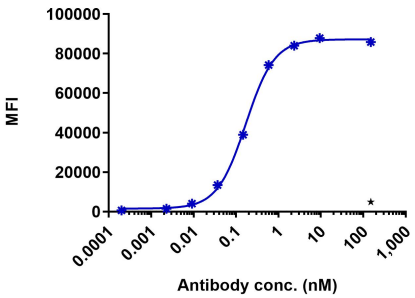
Images



Anti-HLA-C Reference Antibody (Janssen patent anti-HLA-C) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-HLA-C Reference Antibody (Janssen patent anti-HLA-C) is 100%, determined by SEC-HPLC.



CAL-27 cells were stained with Janssen patent anti-HLA-C and negative control protein respectively, washed and then followed by PE and analyzed with FACS, with the EC50 is 0.1696 nM.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.