

## Product datasheet for **CF813378**

### HLAA (HLA-A) Mouse Monoclonal Antibody [Clone ID: OTI2D11]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2D11
Applications:	WB
Recommended Dilution:	WB 1:500-1000
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 25-308 of human HLA-A (NP_002107) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Shipped at -20°C or with ice packs, Upon delivery store at -20°C. Dilute in PBS(pH7.3) if necessary. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	40.8 kDa
Gene Name:	major histocompatibility complex, class I, A
Database Link:	<a href="#">NP_002107</a> <a href="#">Entrez Gene 3105 Human</a> <a href="#">P04439</a>



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**Background:**

HLA-A belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region, and exons 6 and 7 encode the cytoplasmic tail. Polymorphisms within exon 2 and exon 3 are responsible for the peptide binding specificity of each class one molecule. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. Hundreds of HLA-A alleles have been described. [provided by RefSeq, Jul 2008].

**Synonyms:**

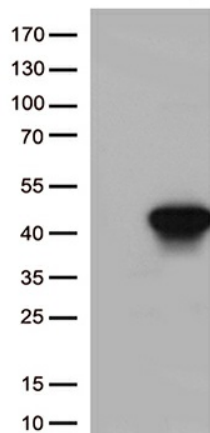
HLAA

**Protein Families:**

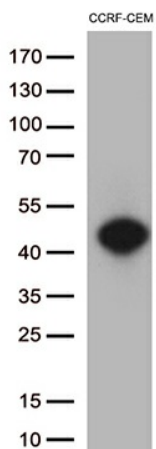
Transmembrane

**Protein Pathways:**

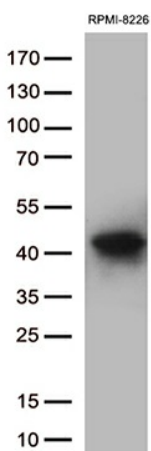
Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, Natural killer cell mediated cytotoxicity, Type I diabetes mellitus, Viral myocarditis

**Product images:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY HLA-A ([RC200661], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HLA-A.(1:1000)



Western blot analysis of extracts (35ug) from CCRF-CEM lysate by using anti-HLA-A monoclonal antibody. (1:1000)(1:500)



Western blot analysis of extracts (35ug) from RPMI-8226 lysate by using anti-HLA-A monoclonal antibody. (1:500)