

### ARG83743 Human HLA A ELISA Kit

Package: 96 wells Store at: 4°C

# Summary

Product Description	ARG83743 Human HLA A ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human HLA A in Serum, plasma, urine, saliva, tissue/cell lysate, faeces and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	HLA A
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	0.15 ng/mL
Sample Type	Serum, plasma, urine, saliva, tissue/cell lysate, faeces and cell culture supernatants.
Standard Range	0.32-20 ng/mL
Sample Volume	100 μL
Alternate Names	HLA-A; Major Histocompatibility Complex, Class I, A; HLA Class I Histocompatibility Antigen, A Alpha Chain; HLAA; HLA Class I Histocompatibility Antigen, A-1 Alpha Chain; MHC Class I Antigen HLA-A Heavy Chain; Leukocyte Antigen Class I-A; Human Leukocyte Antigen A

# **Application Instructions**

Assay Time

3.5 hours

## Properties

Form	96 well
Storage instruction	Store the kit at 4°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

### **Bioinformation**

Gene Symbol	HLA-A
Gene Full Name	major histocompatibility complex, class I, A
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 so that they can be recognized by cytotoxic T cells. 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. More than 6000 HLA-A alleles have been described. The HLA system plays an important role in the occurrence and outcome of infectious diseases, including those caused by the malaria parasite, the human immunodeficiency virus (HIV), and the severe acute respiratory syndrome coronavirus (SARS-CoV). The structural spike and the nucleocapsid proteins of the novel coronavirus SARS-CoV-2, which causes coronavirus disease 2019 (COVID-19), are reported to contain multiple Class I epitopes with predicted HLA restrictions. Individual HLA genetic variation may help explain different immune responses to a virus across a population.[provided by RefSeq, Aug 2020]

Function

Can bind different peptides containing allele-specific binding motifs, which are mainly defined by anchor residues at position 2 and 9. [Uniprot]

#### Images



#### ARG83743 Human HLA A ELISA Kit standard curve image

ARG83743 Human HLA A ELISA Kit results of a typical standard run with optical density reading at 450 nm.