ARG82731
Mouse ERAP1 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82731-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82731-002	Standard	2 X 10 ng/vial	4°C
ARG82731-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82731-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82731-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82731-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82731-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82731-008	25X Wash buffer	20 ml	4°C
ARG82731-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82731-010	STOP solution	10 ml (Ready to use)	4°C
ARG82731-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82731 Mouse ERAP1 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse ERAP1 in serum, plasma (EDTA, heparin) and cell culture supernatants.
Tested Reactivity	Ms
Tested Application	ELISA
Target Name	ERAP1
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	156 pg/ml
Sample Type	Serum, plasma (EDTA, heparin) and cell culture supernatants.
Standard Range	312 - 20000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.5% Inter-Assay CV: 6.8%

Alternate Names	Puromycin-insensitive leucyl-specific aminopeptidase; PILS-AP; EC 3.4.11.-; ARTS1; Adipocyte-derived leucine aminopeptidase; ERAAP1; ARTS-1; A-LAP; PILSAP; ALAP; Endoplasmic reticulum aminopeptidase 1; Aminopeptidase PILS; Type 1 tumor necrosis factor receptor shedding aminopeptidase regulator; APPILS; ERAAP

Application Instructions

Assay Time	~ 5 hours

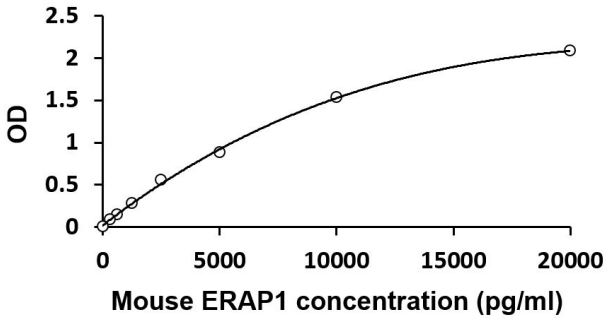
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°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	ERAP1
Gene Full Name	endoplasmic reticulum aminopeptidase 1
Background	The protein encoded by this gene is an aminopeptidase involved in trimming HLA class I-binding precursors so that they can be presented on MHC class I molecules. The encoded protein acts as a monomer or as a heterodimer with ERAP2. This protein may also be involved in blood pressure regulation by inactivation of angiotensin II. Three transcript variants encoding two different isoforms have been found for this gene.[provided by RefSeq, Oct 2010]
Function	Aminopeptidase that plays a central role in peptide trimming, a step required for the generation of most HLA class I-binding peptides. Peptide trimming is essential to customize longer precursor peptides to fit them to the correct length required for presentation on MHC class I molecules. Strongly prefers substrates 9-16 residues long. Rapidly degrades 13-mer to a 9-mer and then stops. Preferentially hydrolyzes the residue Leu and peptides with a hydrophobic C-terminus, while it has weak activity toward peptides with charged C-terminus. May play a role in the inactivation of peptide hormones. May be involved in the regulation of blood pressure through the inactivation of angiotensin II and/or the generation of bradykinin in the kidney. [UniProt]
Highlight	Related products: ERAP1 antibodies; ERAP1 ELISA Kits; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
PTM	N-glycosylated. [UniProt]
Cellular Localization	Endoplasmic reticulum membrane; Single-pass type II membrane protein. [UniProt]

Images



ARG82731 Mouse ERAP1 ELISA Kit standard curve image

ARG82731 Mouse ERAP1 ELISA Kit results of a typical standard run with optical density reading at 450 nm.