



ERAP1 Polyclonal Antibody

Catalog No	YP-Ab-03862
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	ERAP1
Immunogen	The antiserum was produced against synthesized peptide derived from human ARTS-1. AA range:441-490
Specificity	ERAP1 Polyclonal Antibody detects endogenous levels of ERAP1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ALAP;A-LAP;ARTS1;ERAAP;APPILS;ARTS-1;ERAAP1;PILSAP;PILS-AP;ERAP1;Endoplasmic reticulum aminopeptidase 1;KIAA0525;Adipocyte-derived leucine aminopeptidase;Aminopeptidase PILS;Puromycin-insensitive leucyl-specific aminopeptidase;Type 1 tumor necrosis facto
Observed Band	107kD
Calculated Molecular Weight	107kD
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass type II membrane protein .
Tissue Specificity	Ubiquitous.
Function	catalytic activity:Release of an N-terminal amino acid, Xaa- -Xbb-, in which Xaa is preferably Leu, but may be other amino acids including Met, Cys and Phe., caution:It is uncertain whether Met-1 or Met-13 is the initiator.,cofactor:Binds 1 zinc ion per subunit.,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 regula

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],

matters needing attention

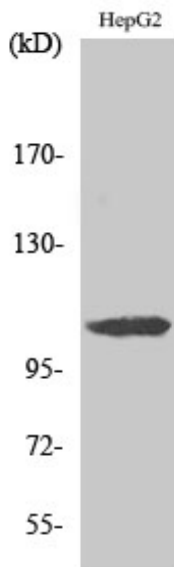
Avoid repeated freezing and thawing!

Usage suggestions

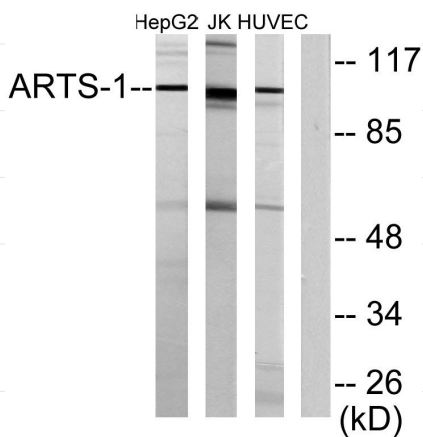
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



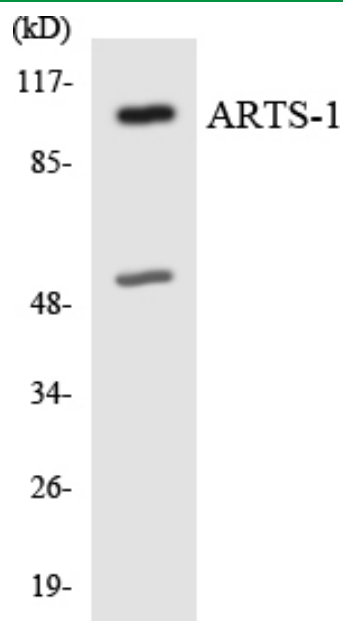
Products Images



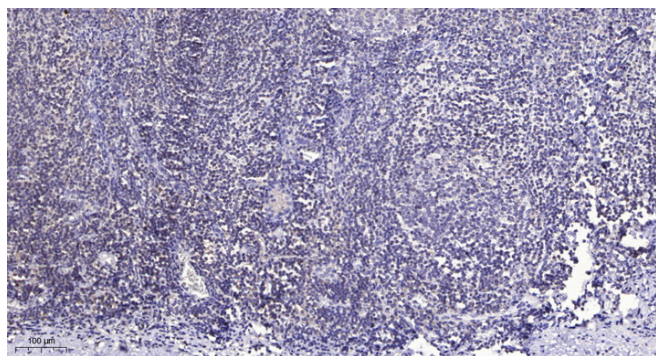
Western Blot analysis of various cells using ERAP1 Polyclonal Antibody diluted at 1:500



Western blot analysis of lysates from HepG2, Jurkat, and HUVEC cells, using ARTS-1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HepG2 cells using ARTS-1 antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 30min).