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ERAP1 Rabbit mAb

Catalog # AP75107

Product Information

Application	WB, IHC-P
Primary Accession	Q9NZ08
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	107235

Additional Information

Gene ID	51752
Other Names	ERAP1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

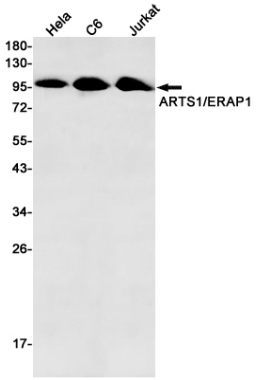
Name	ERAP1
Synonyms	APPILS, ARTS1, KIAA0525
Function	Aminopeptidase that plays a central role in peptide trimming, a step required for the generation of most HLA class I-binding peptides. Peptide trimming is essential to customize longer precursor peptides to fit them to the correct length required for 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.
Cellular Location	Endoplasmic reticulum membrane; Single-pass type II membrane protein

Tissue Location Ubiquitous.

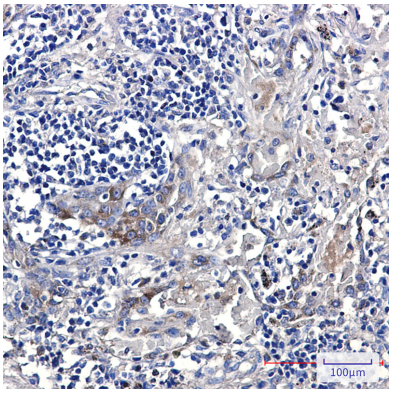
Background

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.

Images



Western blot analysis of ARTS1/ERAP1 in Hela, C6, Jurkat lysates using ERAP1 antibody.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using ARTS1 antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.