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ERAP1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51192

Product Information

Application	WB
Primary Accession	Q9NZ08
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	107235

Additional Information

Gene ID	51752
Other Names	Endoplasmic reticulum aminopeptidase 1, 3411-, ARTS-1, Adipocyte-derived leucine aminopeptidase, A-LAP, Aminopeptidase PILS, Puromycin-insensitive leucyl-specific aminopeptidase, PILS-AP, Type 1 tumor necrosis factor receptor shedding aminopeptidase regulator, ERAP1, APPILS, ARTS1, KIAA0525
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ERAP1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

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.

References

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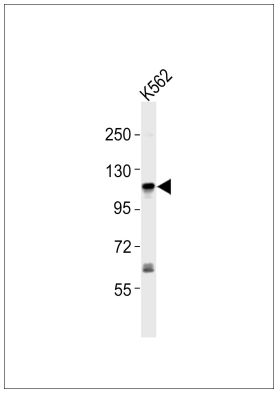
Hattori A.,et al.J. Biochem. 130:235-241(2001).
Schomburg L.,et al.Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
Cui X.,et al.Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.
Nagase T.,et al.DNA Res. 5:31-39(1998).

Images



Anti-ERAP1 Antibodyat 1:1000 dilution + K562 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 107 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.