

Product name:	ERAP1 Rabbit Polyclonal Antibody
Cat number:	ABN10564
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human ARTS-1. AA range:441-490
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight:	107kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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],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 regulation of blood pressure through the inactivation of angiotensin II and/or the generation of bradykinin in the kidney.,induction:By IFN-gamma.,PTM:N-glycosylated.,similarity:Belongs to the peptidase M1 family.,subunit:Monomer. May also exist as a heterodimer; with ERAP2.,tissue specificity:Ubiquitous.,