

## Product datasheet for **AP06756PU-M**

### ARTS1 (ERAP1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200. <b>Immunofluorescence:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 435-489 of Human ERAP1.
Specificity:	This antibody detects endogenous levels of ERAP1 protein. (region surrounding Lys467)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 15 mM Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 110 kDa
Gene Name:	endoplasmic reticulum aminopeptidase 1
Database Link:	<a href="#">Entrez Gene 51752 Human Q9NZ08</a>



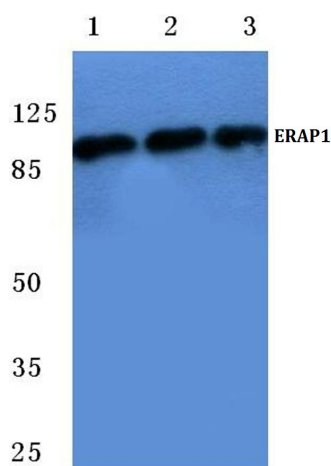
[View online »](#)

**Background:**

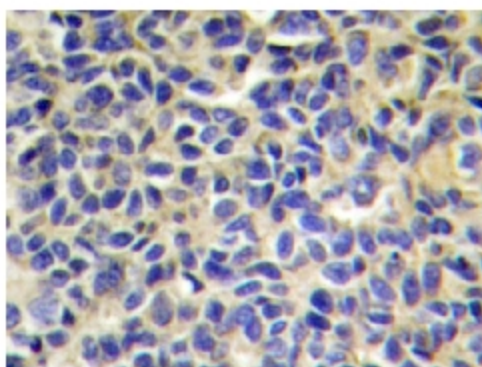
The endoplasmic reticulum (ER) aminopeptidase 1 (ERAP1) is a 120 kDa protein localized to the lumen of the ER, which removes NH<sub>2</sub>-terminal residues from many antigenic precursors for MHC class I peptide presentation. Peptides that are presented by MHC class I on the surface of a cell must be 8-11 residues long, and ERAP1 specifically trims peptides of 9 amino acids or more. ERAP1 is also induced by interferon- $\gamma$ . The gene encoding human ERAP1 maps to chromosome 5q15. ERAP1 has previously been characterized as adipocyte-derived leucine aminopeptidase (A-LAP), puromycin-insensitive leucine-specific aminopeptidase (PILS-AP) and aminopeptidase regulator of TNFR1 shedding (ARTS-1). A-LAP is thought to inactivate several bioactive peptides, including angiotensin II and, subsequently, may be involved in the regulation of blood pressure. PILS-AP is described as playing a role in angiogenesis by regulating the proliferation and migration of endothelial cells, and ARTS-1 is characterized as a TNFR1 binding protein that promotes TNFR1 shedding. Further research will be necessary to fully elucidate the functions of this protein.

**Synonyms:**

APPILS, KIAA0525, Aminopeptidase PILS, ARTS-1

**Product images:**


Western blot (WB) analysis of ERAP1 antibody at 1/500 dilution Lane 1:THP-1 whole cell lysate  
Lane 2:NIH-3T3 whole cell lysate Lane 3:Rat kidney tissue lysate



Immunohistochemistry (IHC) analysis of ERAP1 antibody in paraffin-embedded human breast carcinoma tissue.