

ERAP2 Antibody

Catalog # ASC11695

Product Information

Application	WB, E
Primary Accession	Q6P179
Other Accession	NP_071745 , 11641261
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	110462
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ERAP2 antibody can be used for detection of ERAP2 by Western blot at 1 - 2 μ g/ml.

Additional Information

Gene ID	64167
Other Names	Endoplasmic reticulum aminopeptidase 2, 3.4.11.-, Leukocyte-derived arginine aminopeptidase, L-RAP, ERAP2, LRAP
Target/Specificity	ERAP2; ERAP2 antibody is human reactive. Multiple isoforms of ERAP2 are known to exist. ERAP2 antibody is predicted to not cross-react with ERAP1.
Reconstitution & Storage	ERAP2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	ERAP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ERAP2
Synonyms	LRAP
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. Preferentially hydrolyzes the basic residues Arg and Lys.
Cellular Location	Endoplasmic reticulum membrane; Single-pass type II membrane protein
Tissue Location	Ubiquitously expressed. Highly expressed in spleen and leukocytes.

Background

The endoplasmic reticulum (ER) aminopeptidase 2 (ERAP2), a member of the peptidase M1 family, like the related protein ERAP1, plays a central role in peptide trimming, a step required for the generation of most HLA class I-binding peptides (1,2). Like ERAP1, ERAP2 is localized to the lumen of the ER and is thought to associate with ERAP1 as a heterodimer (1). Both ERAP1 and ERAP2 have been linked to several human diseases ranging from infections to autoimmunity and cancer, and may play a role in the innate immune response (reviewed in 3).

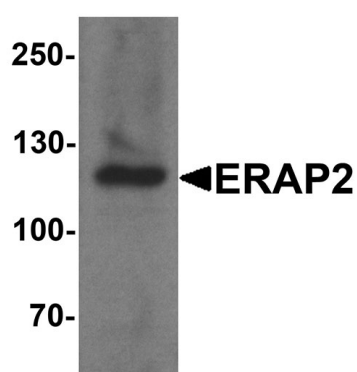
References

Saveanu L, Carroll O, Lindo V, et al. Concerted peptide trimming by ERAP1 and ERAP2 aminopeptidase complexes in the endoplasmic reticulum. *Nat. Immunol.* 2005; 6:689-97.

Saric T, Chang SC, Hattori A, et al. An IFN-gamma induced aminopeptidase in the ER, ERAP1, trims precursors to MHC class I-presented peptides. *Nat. Immunol.* 2002; 3:1169-76.

Cifaldi L, Romania P, Lorenzi S, et al. Role of endoplasmic reticulum aminopeptidases in health and disease: from infection to cancer. *Int. J. Mol. Sci.* 2012; 13:8338-52

Images



Western blot analysis of ERAP2 in human ovary tissue lysate with ERAP2 antibody at 1 µg/ml.

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