

ERAP2 Antibody

Catalog # ASC11695

Specification

ERAP2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, E <u>O6P179</u> <u>NP_071745</u>, <u>11641261</u> Human Rabbit Polyclonal IgG Predicted: 106 kDa

Application Notes

Observed: 120kDa KDa ERAP2 antibody can be used for detection of ERAP2 by Western blot at 1 - 2 μg/ml.

ERAP2 Antibody - Additional Information

Gene ID

64167

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.

ERAP2 Antibody - 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.

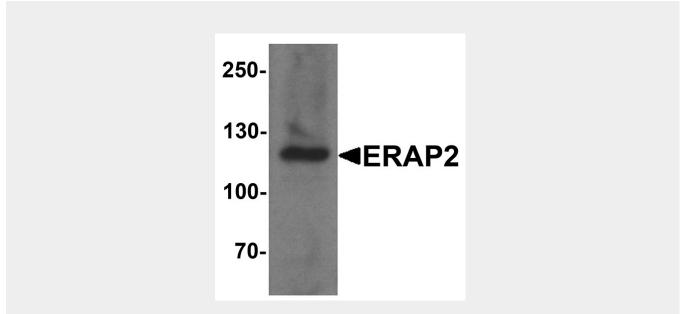


ERAP2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ERAP2 Antibody - Images



Western blot analysis of ERAP2 in human ovary tissue lysate with ERAP2 antibody at 1 $\mu\text{g/ml}.$

ERAP2 Antibody - 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).

ERAP2 Antibody - References

Saveanu L, Carroll O, Lindo V, et al. Concerted peptide trimming by EARP1 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