10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-ERAP2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1375a

Specification

Goat Anti-ERAP2 Antibody - Product Information

Application	**WB**
Primary Accession	Q6P179
Other Accession	NP_071745, 64167
Reactivity	**Human**
Predicted	**Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**110462**

Goat Anti-ERAP2 Antibody - Additional Information

Gene ID 64167

Other Names
Endoplasmic reticulum aminopeptidase 2, 3.4.11.-, Leukocyte-derived arginine aminopeptidase, L-RAP, ERAP2, LRAP

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-ERAP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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.

Goat Anti-ERAP2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-ERAP2 Antibody - Images



AF1375a (0.5 µg/ml) staining of Spleen lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ERAP2 Antibody - Background

Aminopeptidases hydrolyze N-terminal amino acids of proteins or peptide substrates. Major histocompatibility complex (MHC) class I molecules rely on aminopeptidases such as ERAP1 (MIM 606832) and LRAP to trim precursors to antigenic peptides in the endoplasmic reticulum (ER) following cleavage in the cytoplasm by tripeptidyl peptidase II (TPP2; MIM 190470) (Tanioka et al., 2003 [PubMed 12799365]).

Goat Anti-ERAP2 Antibody - References

Serum cytokine receptors in ankylosing spondylitis: relationship to inflammatory markers and endoplasmic reticulum aminopeptidase polymorphisms. Haroon N, et al. J Rheumatol, 2010 Sep. PMID 20595269.
Distinct molecular mechanisms leading to deficient expression of ER-resident aminopeptidases in melanoma. Kamphausen E, et al. Cancer Immunol Immunother, 2010 Aug. PMID 20419298.

NF-kappaB, and not MYCN, regulates MHC class I and endoplasmic reticulum aminopeptidases in human neuroblastoma cells. Forloni M, et al. Cancer Res, 2010 Feb 1. PMID 20103633.
The ERAP2 gene is associated with preeclampsia in Australian and Norwegian populations. Johnson MP, et al. Hum Genet, 2009 Nov. PMID 19578876.
Association of an ERAP1 ERAP2 haplotype with familial ankylosing spondylitis. Tsui FW, et al. Ann Rheum Dis, 2010 Apr. PMID 19433412.