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Goat Anti-RAE1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1904a

Specification

Goat Anti-RAE1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P78406
Other Accession	NP_001015885, 8480
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**40968**

Goat Anti-RAE1 Antibody - Additional Information

Gene ID 8480

Other Names
mRNA export factor, Rae1 protein homolog, mRNA-associated protein mrnp 41, RAE1, MRNP41

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-RAE1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-RAE1 Antibody - Protein Information

Name RAE1

Synonyms MRNP41

Function
Acts as a mRNA export factor involved in nucleocytoplasmic transport (PubMed:20498086, PubMed:33849972). Plays a role in mitotic bipolar spindle formation (PubMed:<a href="http://www.uniprot.org/citations/17172455"

target="_blank">17172455). May function in attaching cytoplasmic mRNPs to the cytoskeleton both directly or indirectly (PubMed:17172455).

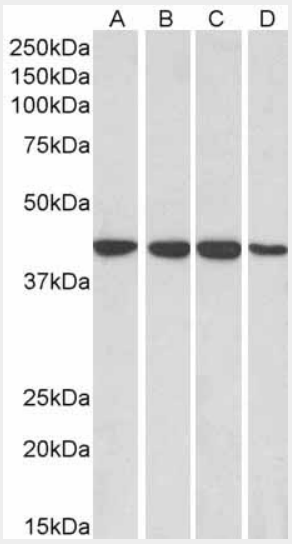
Cellular Location
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, spindle pole. Nucleus envelope. Note=Recruited from interphase nuclei to spindle MTs during mitosis.

Goat Anti-RAE1 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-RAE1 Antibody - Images



AF1904a (0.1 µg/ml) staining of HepG2 (A), HeLa (B), Jurkat (C) and MCF7 (D) lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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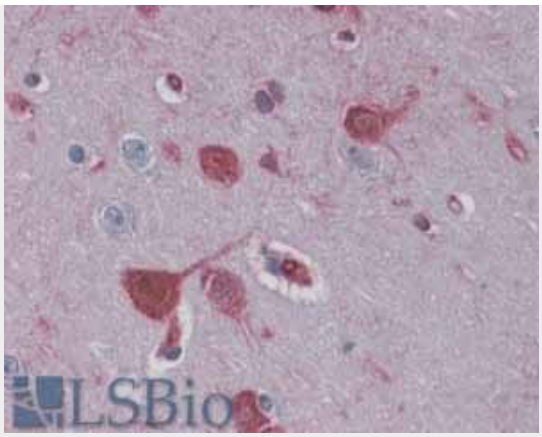
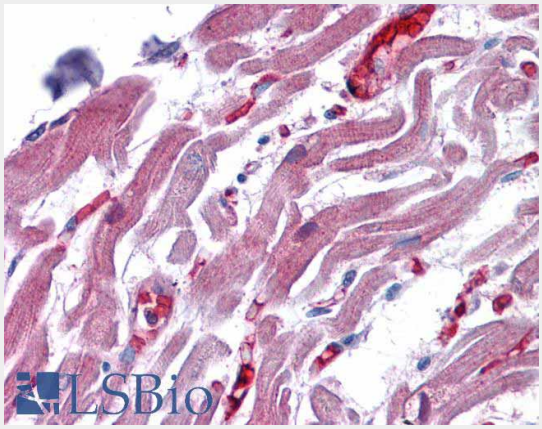


AF1904a (3.8 µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1904a (3.75 µg/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-RAE1 Antibody - Background

Mutations in the Schizosaccharomyces pombe Rae1 and Saccharomyces cerevisiae Gle2 genes have been shown to result in accumulation of poly(A)-containing mRNA in the nucleus, suggesting that the encoded proteins are involved in RNA export. The protein encoded by this gene is a homolog of yeast Rae1. It contains four WD40 motifs, and has been shown to localize to distinct foci in the nucleoplasm, to the nuclear rim, and to meshwork-like structures throughout the cytoplasm. This gene is thought to be involved in nucleocytoplasmic transport, and in directly or indirectly attaching cytoplasmic mRNPs to the cytoskeleton. Alternatively spliced transcript variants encoding the same protein have been found for this gene.

Goat Anti-RAE1 Antibody - References

Intact NKG2D-independent function of NK cells chronically stimulated with the NKG2D ligand Rae-1. Champsaur M, et al. J Immunol, 2010 Jul 1. PMID 20530257.
Structural and functional analysis of the interaction between the nucleoporin Nup98 and the mRNA export factor Rae1. Ren Y, et al. Proc Natl Acad Sci U S A, 2010 Jun 8. PMID 20498086.
Interaction between Rae1 and cohesin subunit SMC1 is required for proper spindle formation. Wong RW. Cell Cycle, 2010 Jan 1. PMID 20016259.
Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
Cohesin subunit SMC1 associates with mitotic microtubules at the spindle pole. Wong RW, et al. Proc Natl Acad Sci U S A, 2008 Oct 7. PMID 18832153.