

Anti-Asap1 (RABBIT) Antibody Asap1 Antibody Catalog # ASR5335

Specification

Anti-Asap1 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Mouse Mouse Polyclonal WB, E, I, LCI This affinity purified antibody has been tested for use in ELISA, IF microscopy and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 130 kDa in size corresponding to ASAP1 protein by western blotting in the appropriate cell lysate or extract. This antibody recognizes both phosphorylated and non-phosphorylated ASAP1 at amino acid Y782.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M
Immunogen	Sodium Chloride, pH 7.2 This affinity purified antibody was
mmunogen	prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 775-800 of mouse ASAP1 protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-Asap1 (RABBIT) Antibody - Additional Information

Gene ID 13196

Other Names 13196

Purity

This affinity-purified antibody is directed against mouse ASAP1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity occurs against both the phosphorylated and non-phosphorylated forms of the protein at residue Y782. A BLAST analysis was used to suggest cross reactivity with ASAP1 proteins from human, chicken, bovine, dog, rat and chimpanzee based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

Storage Condition



Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Asap1 (RABBIT) Antibody - Protein Information

Name Asap1

Synonyms Ddef1, Kiaa1249, Shag1

Function

May function as a signal transduction protein involved in the differentiation of fibroblasts into adipocytes and possibly other cell types. Possesses phosphatidylinositol 4,5-bisphosphate-dependent GTPase-activating protein activity for ARF1 (ADP ribosylation factor 1) and ARF5 and a lesser activity towards ARF6. May coordinate membrane trafficking with cell growth or actin cytoskeleton remodeling by binding to both SRC and PIP2. Part of the ciliary targeting complex containing Rab11, ASAP1, Rabin8/RAB3IP, RAB11FIP3 and ARF4, which direct preciliary vesicle trafficking to mother centriole and ciliogenesis initiation (By similarity).

Cellular Location

Cytoplasm. Membrane. Golgi apparatus {ECO:0000250|UniProtKB:Q9ULH1}. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:Q9ULH1}. Note=Predominantly cytoplasmic Partially membrane-associated

Tissue Location

Expressed in all tissues examined but a most abundant expression was found in the testis, brain, lung and spleen. A heightened expression was seen in the adipose tissue from obese (ob) and diabetic (db) animals.

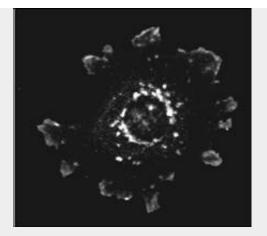
Anti-Asap1 (RABBIT) Antibody - Protocols

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

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

Anti-Asap1 (RABBIT) Antibody - Images





Immunofluorescent microscopy using Rockland's Affinity Purified anti-ASAP1 antibody shows detection of ASAP1 present in mouse NIH3T3 cells transfected with activated Src. Specific staining is not present when antibody is pre-incubated with the immunizing peptide prior to reaction with cells. Personal Communication. Paul Randazzo, NIH, CCR, Bethesda, MD.

Anti-Asap1 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. ASAP1 (also known as AMAP1, 130-kDa phosphatidylinositol 4,5-biphosphate-dependent ARF1 GTPase-activating protein, PIP2-dependent ARF1 GAP, ADP-ribosylation factor-directed GTPase-activating protein 1, ARF GTPase-activating protein 1, Development and differentiation-enhancing factor 1, Differentiation-enhancing factor 1, DEF-1) is an Arf-directed GTPase activating protein that is a substrate for the kinases Src and FAK and has been implicated in the regulation of membrane traffic, focal adhesions and invadopodia/podosomes. Phosphorylation of ASAP1 at tyrosine 782 has been found to affect enzymatic and some biological activities, including the function of invadopodia. ASAP1 is expressed in many tissues but is most abundant in the testis, brain, lung and spleen. A heightened expression was seen in the adipose tissue from obese (ob) and diabetic (db) animals. Multiple transcript variants have been reported for this protein.