

Datasheet for 600-401-910**Asap1 phospho Y782 Antibody****Overview**

Description:	Anti-ASAP1 pY782 (RABBIT) Antibody - 600-401-910
Item No.:	600-401-910
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-ASAP1 pY782 Antibody, ASAP-1, ASAP 1, Development and differentiation enhancing factor 1 antibody, 130 kDa phosphatidylinositol 4 5 biphosphate dependent ARF1 GTPase activating protein antibody, ADP ribosylation factor directed GTPase activating protein 1 antibody, AMAP 1 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Asap1
Reactivity:	Human, Mouse
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide corresponding to an internal region near amino acids 775-800 of mouse ASAP1 protein.
Purity/Specificity:	This affinity-purified antibody is directed against the phosphorylated form of mouse ASAP1 protein at the pY782 residue. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross-adsorbed against the non-phosphorylated form of the immunizing peptide. Reactivity occurs against mouse ASAP1 pY782 protein and the antibody is specific for the phosphorylated form of the protein. Reactivity with non-phosphorylated mouse ASAP1 is minimal by ELISA. 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.
Relevant Links:	• UniProtKB - Q9QWY8 • NCBI - 65301464 • GeneID - 13196

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA, immunohistochemistry, 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 phosphorylated ASAP1 protein by western blotting in the appropriate cell lysate or extract. Less than 2.5% reactivity is observed against the non-phosphorylated form of the immunizing peptide. This antibody is phospho specific for pY782 of ASAP1 protein.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:4,000 - 1:16,000
IHC:	20-40 µg/ml
WB:	1:500 - 1:2,000

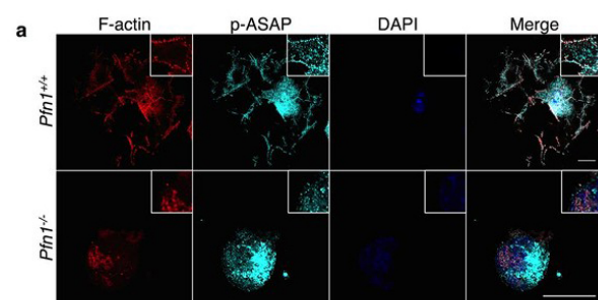
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.00 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

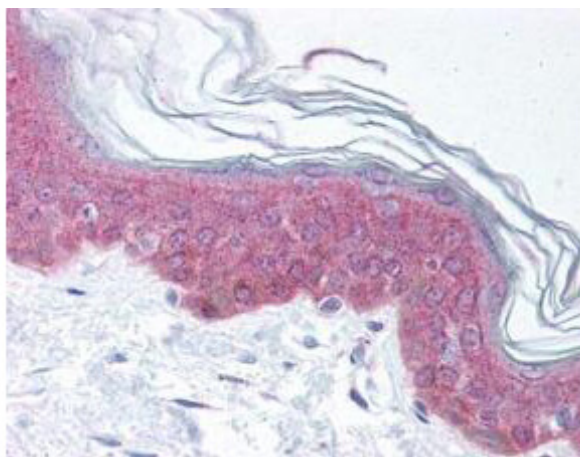
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



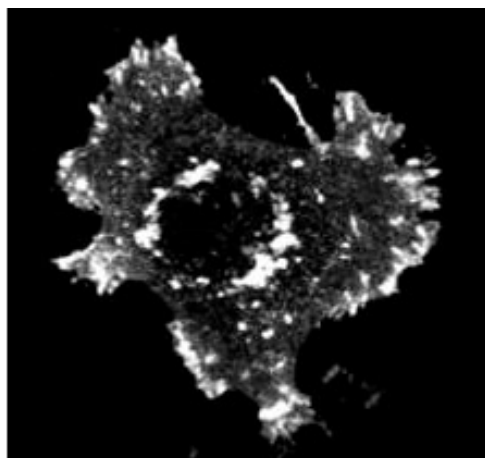
Immunofluorescence Microscopy

Defective podosome formation of *Pfn1*^{-/-} MKs. Confocal images of bone marrow-derived MKs spread (3 h) on collagen I and stained for F-actin, DAPI and phospho-ASAP (600-401-910). Scale bar represents 25 μ m. Images are representative of at least 5 vs 5 individuals. Supplementary Figure 5. PMID: 25187265



Immunohistochemistry

Rockland's affinity purified anti-ASAP1 pY782 antibody was used at 20 µg/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows moderate intracellular positive staining in epidermal keratinocytes in human skin at 40X. Tissue was formalin-fixed and paraffin embedded. The image shows localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. Personal Communication, Tina Roush, LifeSpan Biosciences, Seattle, WA.



Immunofluorescence Microscopy

Immunofluorescent microscopy using Rockland's Affinity Purified anti-ASAP1 pY782 antibody shows detection of phosphorylated 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.

References

- Bender M et al. Megakaryocyte-specific Profilin1-deficiency alters microtubule stability and causes a Wiskott-Aldrich syndrome-like platelet defect. *Nat Commun.* (2014)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.