

Certificate of Analysis

Product: Affinity Purified Anti-ASAP1 (Rabbit)

Code: 600-401-911

Lot #: 16943

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 0.95 mg/ml (by UV absorbance at 280 nm)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Storage Conditions: Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

Background Information: 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.

Application Note(s): 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.

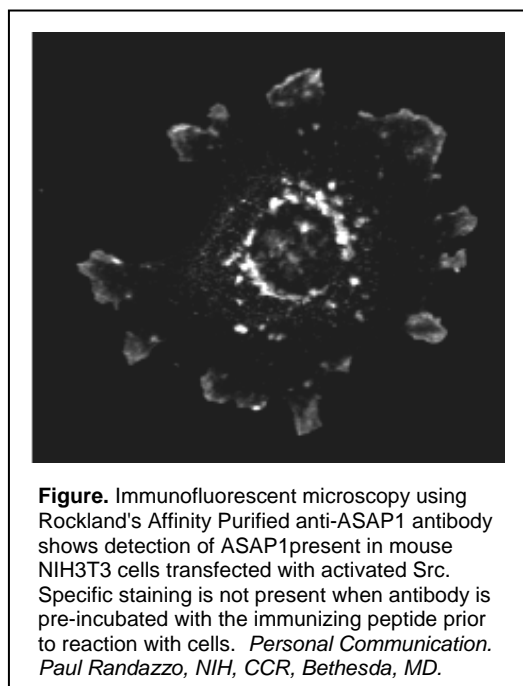


Figure. Immunofluorescent microscopy using Rockland's Affinity Purified anti-ASAP1 antibody shows detection of ASAP1 present in mouse NIH3T3 cells transfected with activated Src. Specific staining is not present when antibody is pre-incubated with the immunizing peptide prior to reaction with cells.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

Recommended Dilutions:	ELISA	1:2,000 - 1:10,000
	WESTERN BLOT	1:500 - 1:2,000
	IF MICROSCOPY	User Optimized
	OTHER APPLICATIONS	User Optimized

Purity and Specificity: 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.

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 777-787 of mouse ASAP1 protein (see below).

Relevant Links: NCBI [NP_034156](#) (see also [AAC98349](#))

Swiss-Prot [Q9QWY8](#)

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Protein Sequence: Mouse ASAP1, 1147 aa, predicted MW 130 kDa

1	mrssasrlss	fssrdslwnr	mpdqjvsef	iaettedyns	pttssfttrl	hncrntvll
61	eealdqdrta	lqkvkksvka	iyngqdhvq	neenyaqvld	kfgsnflsrd	npdlgtafvk
121	fstltkelst	llknllqgls	hnvifltdsl	lkgdlkgvkg	dlkkpfdkaw	kdyetkftki
181	ekekrehakg	hgmirteitg	aeiaeemeke	rriqlqmce	yliikveikt	kkgydllqnl
241	ikyhaqcnf	fqdglktadk	lkqyieklaa	dlyniktqtd	eekkqtlair	dliksslqld
301	pkevgglyva	sranssrrds	qsrqggysmh	qlqgnkeygs	ekkgfllkks	dgirkvwqrr
361	kcavkngiit	ishatsnrqp	aklnlltcqv	kpnaedkksf	dlishnrtyh	fqaedeqdyi
421	awisvltnsk	eealtmafrg	eqstgensle	dltkaiiedv	qrlpgndicc	dcsseptwl
481	stnlgiitci	ecsgihremg	vhisriqsle	ldkigtsell	laknvgnnsf	ndimeanlps
541	pspkptpssd	mtvrkeyita	kyvdhrfsrk	tcasssakln	elleaiksrd	llaliqvyaec
601	gvelmepile	pgqelgetal	hlavrtadqt	shlhvdfivq	ncgnldkqts	vgntvlhycs
661	mygkpeckl	llrskptvdi	vnqngetaid	iakrlkatqc	edllsqaksg	kfnphvhvey
721	ewnlrqdemd	esdddlddkp	spickerspr	pqsfcchssi	spqdklalpg	fstprdkqrl
781	sygaftnqif	aststdlpts	ptseappppp	rnagkgptgp	pstlplgtqt	ssgsstlskk
841	rppppppghk	rtlspdppl	phgppnkgai	pwgndvgpss	ssktankfeg	lsqqastssa
901	ktalgrpvlp	klpqkvalrk	tetshhlisd	rtnippetfq	kssqtltpq	kpplgelppk
961	pvelapkpqv	gelppkpgel	ppkpqldlp	pkpqlsdpp	kpqmkdlppk	pqlgdllaks
1021	qagdvksakvq	ppsevtqrsh	tgdlspnvqs	rdaiqqase	dsndltptlp	etpvplprki
1081	ktiydcqadn	ddelfiege	viivtgeedq	ewwighiegq	perkgvfpvs	ntgknkvrsv
1141	fvhilsd					

General References:

Brown MT, Andrade J, Radhakrishna H, Donaldson JG, Cooper JA, Randazzo PA. (1998) ASAP1, a phospholipid-dependent Arf GTPase-activating protein that associates with and is phosphorylated by Src. *Mol. Cell Bio.* **18**: 7038-7051.

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Liu, Y., Loijens, J.C., Martin, K.H., Karginov, A.V. and Parsons, J.T. (2002) The association of ASAP1, an ADP ribosylation factor-GTPase activating protein, with focal adhesion kinase contributes to the process of focal adhesion assembly. *Mol. Biol. Cell* **13** (6), 2147-2156.

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#[MB-070](#) Blocking Buffer for Fluorescent Western Blotting

#[KIA-003](#) **MaxTag**™ Anti-RABBIT IgG Kit for Immunoblotting

#[MB-070](#) Blocking Buffer for Fluorescent Western Blotting

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