Qty: 100 µg/200 µl
Mouse anti-SF2/ASF
Catalog No. 32-4500
Lot No.

Mouse anti-Splicing Factor-2 (SF2/ASF)

FORM
This monoclonal antibody is supplied as a 200 µl aliquot at a concentration of 0.5 mg/ml in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: 96 [1]

ISOTYPE: Mouse IgG_{2b}

IMMUNOGEN
Recombinant SF2/ASF protein.

MOLECULAR WEIGHT
The calculated MW of SF2/ASF is 27.7 kDa, but it typically shows up as a ~33 kDa band on Western blots.

SPECIFICITY
This antibody is specific for the N-terminal portion (1-97 aa) of the SF2/ASF protein comprising the RNA-recognition motif (RRM1). Reactivity is not affected by phosphorylation state of SF2/ASF. On Western blots, a band of ~33 kDa is seen with doublet or triplet bands sometimes evident due to phosphorylation differences. [1]

REACTIVITY
This antibody is confirmed reactive with human (HeLa cells), mouse and rat. Reactivity with other species has not been tested by SF2/ASF is highly conserved (e.g. mouse and human protein are 100% identical) so reactivity with other species is likely.

Sample	Immunofluorescence	Western blotting	Immunoprecipitation
Human	+	+++	++
Mouse	+	+++	++
Rat	ND	+++	

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable NA, Not determined ND)

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western blotting[1]: 0.5 - 1 µg/ml
Immunofluorescence[1]:
Immunoprecipitation[1]:

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long term storage. Avoid repeated freezing and thawing.

(cont'd)

BACKGROUND

Numerous protein and ribonucleoprotein components are required to catalyze pre-mRNA splicing. The SR proteins are essential splicing factors and also regulate alternative splicing of many pre-mRNAs.[2] Alternative splicing is a major mechanism for controlling expression of cellular and viral genes. SR proteins are a family of highly conserved serine/arginine rich RNA-binding proteins. Nine human SR proteins including SF2/ASF are currently known[3]. Based on primary sequence and on motifs shared with other proteins, human SF2/ASF is a 248-amino acid protein composed of four domains. SF2/ASF exists predominantly or exclusively in a highly phosphorylated state in a majority of cells.

REFERENCES

1. Hanamura A., et. al. Regulated tissue specific expression of antagonistic pre-mRNA splicing factors. *RNA* 4:430-444, (1998).
2. Cáceres JF, et. al. Role of the modular domains of SR proteins in subnuclear localization and alternative splicing specificity. *J Cell Biol* 138(2):225-238, (1997).
3. Liu HX., et. al. Identification of functional exonic splicing enhancer motifs recognized by individual SR proteins. *Genes Dev* 12(13):1998-2012 (1998).

RELATED PRODUCTS

Product	***Clone***	***Cat. No.***
Mouse anti-SF2/ASF	103	32-4600
Mouse anti-PTB	1	32-4800
Mouse anti-PTB	3	32-4900
Mouse anti-PTB	7	32-5000
Ms anti-SR Proteins	16H3	33-9300
Ms anti-SRp20	7B4A12	33-4200
Ms anti-SR	1H4 (1H4G7)	33-9400

Product	***Clone***	***Cat. No.***
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

ZyMAX™ Goat x Mouse IgG (H+L)	**Conjugate**
81-6500	Purified
81-6511	FITC
81-6514	TRITC
81-6515	Cy™3
81-6516	Cy™5
81-6520	HRP
81-6522	AP
81-6540	Biotin

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