

Biotin labeled SBA

Product Description

Name: FITC Conjugated *Glycine max* Lectin – SBA from soybean

Catalog Number: FP-MS6140 1 mg purified SBA FITC / 1 ml Buffer Carbohydrate Specificity: α and β - N-Acetylgalactosamine > α and β -Galactose Inhibitory Carbohydrate: Terminal α - and β - N-Acetylgalactosamine > Galactose

Activity : Less than 4 μg/ml will agglutinate fresh A₁ cells. Older B cells can react stronger

than A₂ cells.

Buffer: 0.01M Phosphate -0.15M NaCl, pH7.2-7.4. Contains 0.05% sodium azide as a

preservative.

Chemical Used for Fluorescein Isothiocyanate,FITC.

Conjugation:

Storage: Store liquid material frozen in aliquots in amber vials or covered with foil. Avoid freeze-thaw

cycles. Clarify by centrifugation.

Stability: The liquid material is stable for at least 1 year when stored frozen in aliquots with 0.05%

sodium azide added as a preservative.

Directions for use

The following is a general Procedure and Trouble-Shooting Guide. The information is provided only for your convenience.

Procedure for Tissue Sections

- 1. Wash and block tissue section or blot. Do not use serum products, they contain glycoproteins which may lead to high levels of non specific background. After blocking, rinse briefly with Buffer (See above).
- 2. Dilute **Fluorescent Labeled Lectin** to desired concentration of 20-100 µg/ml using Buffer.
- 3. Incubate section or blot for 30-90 minutes at room temperature in a moist chamber. Wash tissue section with Buffer three times.



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4. Examine tissue section with Fluorescent microscope. Use appropriate filter.

Procedure for Cell Suspension

- 1. Wash cells with Buffer (See above)
- 2. Collect cells by centrifugation.
- 3. Dilute Fluorescent Labeled Lectin to 100 µg/ml using Buffer.
- 4. Incubate approximately 1x10⁶ cells with 1 ml diluted Fluorescent labeled Lectin for 15 minutes at room temperature or in a 37°C water bath.
- 5. Wash cells with Buffer three times using centrifugation.
- 6. Examine cells, with or without fixation with Fluorescent microscope. Use appropriate filter. Ref. K. Phiss. (1977). Experimental Pathology, 14, S15

Fluorochromes must be protected from light. Perform incubation, when practical, in a dark room or covered in foil.

	Absorption and Emission	
	Absorption/Excitation Rate	Emission Max.
FITC	492 nm	517 nm
TRITC	554 nm	570 nm
SR101	596 nm	615 nm

Carbohydrate Inhibition

Inhibition of lectin binding may be accomplished by using one of two procedures:

A. Before incubating with **Fluorescent Labeled Lectin**, incubate section or cells with inhibitory carbohydrate for 30-60 minutes at room temperature. NOTE: Complete inhibition may NOT occur.

B. Preincubate diluted **Fluorescent Labeled Lectin** with inhibitory carbohydrate for 30-60 minutes at room temperature before applying to section or cells.

TROUBLE SHOOTING GUIDE

Problem	Cause	Solution
Weak or no Staining	 Low concentration of specific oligosaccharide on sample. Low concentration of lectin conjugate. Low concentration of avidin conjugate. Insufficient incubation time. Inappropriate treatment of sample prior to labeling. 	Causes #1 - #4 a. Increase incubation time b. Increase concentration of sample (on blot) lectin conjugate and/or avidin conjugate. a. Treat section or blot with a different blocking reagent.
High Background	Lectin conjugate is too concentrated. Insufficient washing. Autofluoresent sample	a. Decrease concentration of Lectin conjugate b. Shorten incubation times. a. Perform multiple washings and prolong washing time. a. Use fluorochrome with different excitation and emission spectrum. b. Use a different lectin conjugate (enzyme or colloidal gold).
Unexpected Staining Pattern	Multiple causes	a. Perform control reactions b. Use other cytochemical technique to prove or disprove the findings.

References

- **Bezkorovainy A.** et al, Biochemistry, **10**:3761-3764 (1971)
- Horejsi V. et al, Biochem. Biophys. Acta., 538:299-315 (1978)
- Kelly C. et al., Biochem J. 220:221-226 (1984)





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- Uhlenbruck G. et al., Immunobiol. 163:36-47 (1982)

Related products

- <u>Lectin List</u> (or search <u>conjugated lectins</u>):
- ConA-Biotin, <u>FP-MS9690</u>; -FITC, <u>FP-47496A</u>;
 -Cy3, <u>FP-WT8680</u>,
- GS-I-FITC; <u>FP-MS9020</u>

- PNA-FITC, <u>FP-BV4181</u>
- WGA-biotin, <u>FP-MS5730</u>; -SR101, <u>FP-MS9540</u>; -FITC, <u>FP-CE8070</u>

Ordering information

Catalog size quantities and prices may be found at www.interchim.com/

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask: FluoProbes® / Interchim; Hotline: +33(0)4 70 03 73 06

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