SiaFind™ α2,3-Specific Lectenz® SureLight™ 488 Kit contents

Catalog #	Description	Size	M. W.	Storage
SK2301F	SiaFind™ α2,3-Specific Lectenz® SureLight™ 488 (SP2301F-1MG)	0.1 mL (10 mg/mL)	77,500	-20°C, up to 6 months
	5X SiaFind™ Binding Buffer 1 (BA0101)	100 mL		4 to 25°C

This product is for research use only and not for resale or for any use in the manufacture of a therapeutic or for any diagnostic purpose.

Product Description

Lectenz® are a novel class of **lect**in-like, **enz**yme-derived glycan-targeting affinity reagents engineered by computationally-guided directed evolution. The reagents are highly purified recombinant proteins, each designed to bind a specific glycan structure, and have advantages over naturally occurring lectins in rapid detection and enrichment of glycoconjugates.

SiaFind™ α2,3-Specific Lectenz® SureLight™ 488 Kit (Cat #SK2301F) contains a sialic acid affinity reagent for the detection, separation, or enrichment of sialoglycans terminating in Neu5Acα2,3Gal commonly found in glycoconjugates (glycoproteins, glycolipids, and oligo- or polysaccharides). It has high affinity and specificity towards α2,3-linked sialic acids on glycans. However, it does not bind effectively to branched sialylated epitopes such as sialyl Lewis A/X. Each kit also includes a 5X binding buffer to ensure maximum reagent specificity and ease of use.

Each **SiaFind™** Lectenz® has a molecular mass of about 77 kD and works as a monomer without bivalent metal ions. It is 6xHis-tagged at its *N*-terminus, and an anti-polyhistidine antibody can be used for detection or, in the case of the fluorescent version, directly detected.

SiaFind™ α2,3-Specific Lectenz® SureLight™ 488 is made for fluorescence detection (Ex 496 nm; Em 517 nm). Applications include Western Blot, FLISA, flow cytometry, fluorescence microscopy, etc.

Form and Storage

The **SiaFind™ Lectenz® SureLight™ 488** reagent is supplied as a 10 mg/mL solution in a storage buffer (50 mM EPPS, 100 mM NaCl, pH 7.5). Concentration is determined by spectrophotometry using $E^{1\%}$ 12.7. The actual absorbance at 280 nm is calculated by measuring the observed absorbance at 280 nm and subtracting the absorbance at 493 nm multiplied by a correction factor of 0.11; $A280_{actual} = A280_{observed} - (A493 \times 0.11)$. Store at 4°C for up to 5 days or -20°C for up to 6 months protected from light. **Aliquoting is recommended to avoid repeated freeze-thaw cycles.** Store in dark tubes, and perform experiments protected from light.

All 5X buffers should be diluted to 1X with ultrapure water. For instance, to make 250 mL, add 50 mL of any 5X buffer to 200 mL water and mix by inversion. All buffers may be stored at 4 to 25°C.

Western Blotting Guide

Use 0.1 - 1.0 µg fetuin and/or 3'-sialyllactose-BSA as positive control.

Prepare 1X SiaFind™ Binding Buffer 1 (SBB1, 10 mM EPPS, 10 mM NaCl, pH 7.5) from the 5X binding buffer (Cat #BA0101). Prepare SBB1 plus 0.1% Tween-20 (SBB1T) for membrane washing.

Prepare SBB1T with 5% globulin-free BSA for blocking. Incubate the membrane at room temperature for 1 h with agitation.

Prepare 10 µg/mL **SiaFind™ Lectenz® SureLight™ 488** (SP2301F) in SBB1T with 0.5% globulin-free BSA.

Incubate membrane in the probe solution at room temperature for 1 h with agitation protected from light. Rinse membrane 3 X 5 min with SBB1T.

Rinse membrane 3 X 5 min with SBB1. Detect fluorescence using an appropriate imaging system.

***Note: SiaFind™** Lectenz® are sensitive to salt. Titration of NaCl concentration in the binding buffer may be performed. They will work in common Western Blotting buffers, such as PBS or TBS, but the binding signal may be significantly weaker.*

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