

# Various Blocking solution for WB and ELISA

# Blocking Solutions

The selection of Blocking agents is very important in ELISA and WB. We have developed optimized Ready-to-Use blocking solutions with various characteristics.

Please try our blocking solutions if you use Skim milk for WB, or if you need storage of pre-coated ELISA plates.



### [Product Feature]

- 1. Ready-to-Use
- 2. Optimized for WB or ELISA
- 3. For WB, stronger signal can be obtained by using Skim milk\*
- 4. For ELISA, pre-coated plate can be stored for months \*\*

\*:based on experiment in our laboratory, \*\*:except that antibody or antigen can not stored for long time.

### [ Product Outline ]

c-Block: 100% chemical components. Good for WB and antibody-detecting ELISA.

h-Block: Casein-based. Good for many applications.

k-Block: Denatured casein-based. Shows stable results in many applications.

b-Block: BSA-based. Good for many applications.

Trial set: Composed of all the above 4 solutions. Good for screening the best blocking solution.

### [Product lineup]

Field	Product #	Product name	content	Price
Western	BCL-BKCW-01	c-Block-w	500 mL	¥8,000
	BCL-BKHW-01	h-Block-w	500 mL	¥8,000
	BCL-BKKW-01	k-Block-w	500 mL	¥8,000
	BCL-BKBW-01	b-Block-w	500 mL	¥10,000
	BCL-BKSW-01	Blocking solution Trial set (Western)	20 mL×4	¥4,000
ELISA	BCL-BKCE-01	c-Block-e	500 mL	¥10,000
	BCL-BKHE-01	h-Block-e	500 mL	¥10,000
	BCL-BKKE-01	k-Block-e	500 mL	¥10,000
	BCL-BKBE-01	b-Block-e	500 mL	¥12,000
	BCL-BKSE-01	Blocking solution Trial set (ELISA)	20 mL×4	¥5,000

## [Related Products]

Product #	Product name	content	Price	Outline
BCL-SBN-02	Signal Booster Neo 250	250 mL	¥15,000	Protein-free antigen-antibody reaction enhancer
BCL-125	Signal Booster	250 mL set	¥18,000	Standard antigen-antibody reaction enhancer

Different sizes are available for Signal Booster and Signal Booster Neo.

### [Produced by]

Beacle, Inc.

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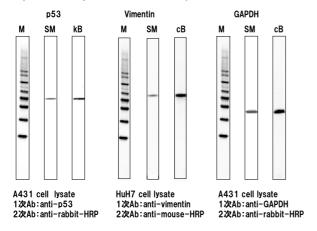
Website: http://www.beacle.com.

E-mail: <u>technical-support@beacle.com</u>

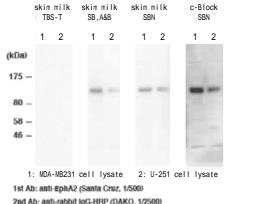
### **Experimental examples**

(Though not indicated each specified blocking solutions were used for WB and ELISA.)

Example 1, comparison of blocking solutions



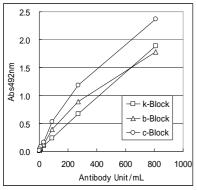
Example 3. Detection of Ephrin type-A receptor2



2nd Ab: anti-rabbit IgG-HRP (DAKO, 1/2500)

Detection: Chemi-Lumi One (Nacalai) Courtesy of Dr. Negishi of Kyoto Univ. LAS3000 (exposure time, 15 seconds)

Example 5. Antibody-detecting ELISA

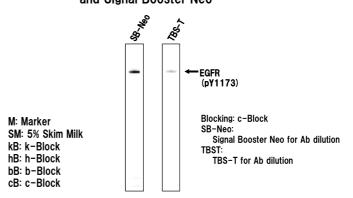


Capture Ag: Filaria antigen

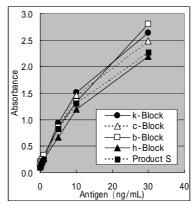
Blocking: as indicated (Dried plates were stored for 3 days.)

Antibody sample: infected serum Detection: MAD reagent (HRP) in SB.

Example 2. Detection of phospho-protein with c-Block and Signal Booster Neo



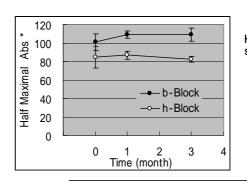
Example 4. Antigen-detecting sandwich ELISA



Capture Ab: anti-preS1 mouse mono-1 Blocking: as indicated

(Dried plates were stored for 2 days.) Antigen: HBsAg L-protein ST type 1st Ab: anti-preS1 mouse mono-2 in SB 2nd Ab: anti-mouse IgG-HRP for 1hr.

Example 6. Stability of pre-coated plate



HBsAq detection by sandwich ELISA system

**Explanation of abbrebiation** SB: Signal Booster

SBN: Signal Booster Neo

Product.S: well-known plate preservative

### Selection of Blocking Solutions

A general rule of selection for Blocking Solution is described. We strongly recommend to select the best one by screening using Trila Set.

Western Blot: Many reserachers seems to use Skim milk. Skim milk is not bad choice, but it very often gives you weak signal due to its strong blocking action. Below is the recommendated use of our bloking solutions.

①To get higher signal(accept some background increase):

2To reduce background(accept some decrease of signal): 3To use as a standard blocking:

4 To detect phospho-protein:

k-Block, c-Block b-Block, h-Block

h-Block, b-Block c-Block, b-Block Use c-Block when avoiding protein contamination in an assay system.

O To increase signals, use Signal Booster or Signal Booster Neo.

ELISA: Below shows choice of blocking solutions depending on the ELISA system you use. All the solutions for ELISA are desinged for long term preservation, and dryed precoated plate can be stored for a few months after blocking at 4°C.

Antigen-detecting ELISA: Direct method (detect antigen adsorbed on plate by detecting antibody):

Antibody-sandwich method (detect antigen by captured antibody by detect antibody):

Antibody-detecting ELISA: Direct method (detect antibody captured by pre-coated antigen):

Antigen-sandwich method (detect antibody by captured antigen by detect antigen):

c-Block, b-Block, k-Block

k-Block, b-Block, h-Block c-Block, b-Block, k-Block

k-Block, b-Block, h-Block