

Product No.18439

## Bullet ImmunoReaction Buffer

Bullet ImmunoReaction Buffer accelerates antigen-antibody reactions in immunoblot processing applications.

### Features

- Bullet ImmunoReaction Buffer shortens the antigen-antibody reaction time by half.
- One ready-to-use reagent; Available for both primary and secondary antibodies.
- The preservative in the Bullet ImmunoReaction Buffer does not affect alkaline phosphatase or horseradish Peroxidase activity.

<Reactivity and Reaction Time with use of Bullet ImmunoReaction Buffer compared to tTBS>

	Reaction time of (1° antibody)	15 min	30 min	60 min	120 min	Over night (at 4°C )
	Reaction time of (2° antibody)	15 min	30 min	60 min	120 min	60 min
Antibody diluent	Bullet ImmunoReaction Buffer					
	0.1%-tTBS					

Sample : HeLa cell lysate 2 µg (left), 0.4 µg (right)

1° antibody : Anti β-actin mouse monoclonal antibody (Santa Cruz #sc-47778) 1:1,000

2° antibody : HRP conjugated Anti Mouse IgG antibody (Novus #NB7574) 1:40,000

### Protocol

Antibody dilution with Bullet ImmunoReaction Buffer shortend the reaction time by about half.

(With overnight incubation at 4°C in conventional buffers, adjust incubation to 30 - 60 min at room temperature with Bullet ImmunoReaction Buffer)

### Attention

- Bullet ImmunoReaction Buffer is compatible with both primary (conjugated and non-conjugated), and secondary antibodies.
- DO NOT dilute and mix with other blocking reagents; Bullet ImmunoReaction Buffer is to be used as is.
- Before use, warm Bullet ImmunoReaction Buffer to room temperature.
- Shaking is required during the antigen-antibody probing reaction.
- Insufficient reaction time may cause poor reproducibility.
- Cross-reaction may occur in some cases. Characterize possible cross-reaction before use.
- Bullet ImmunoReaction Buffer may inhibit biotin-avidin (streptavidin) reaction in some cases. In these instances, increase the amount of avidin (streptavidin) or biotin- avidin (streptavidin) used.
- Optimization of exposure time or dilution ratios may be required in some cases. (See 'Reference Data')

### Caution

- Bullet ImmunoReaction Buffer is NOT recommended for concurrent use with Signal enhancer reagent such as Signal Enhancer HIKARI.
- Bullet ImmunoReaction Buffer formulated specifically for immunoblotting, and is NOT suitable for immunohistochemistry or ELISA.

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**Storage**

Refrigerator

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**Expiration**

Expiration date is stated on the product label.

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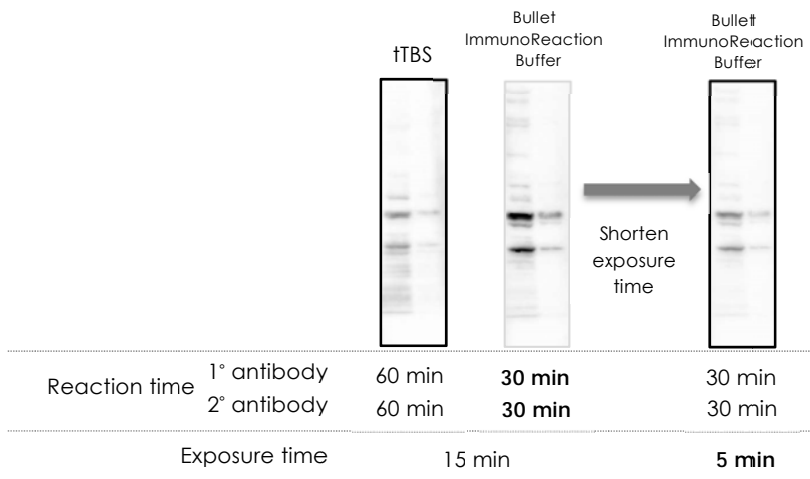
**Packing**

500 mL (Product No.18439-85)

## Reference Data

### <Data 1>

Reactivity may occur too quickly, resulting in overexposure. In this case, optimal exposure may be attained obtained by shortening the exposure time.



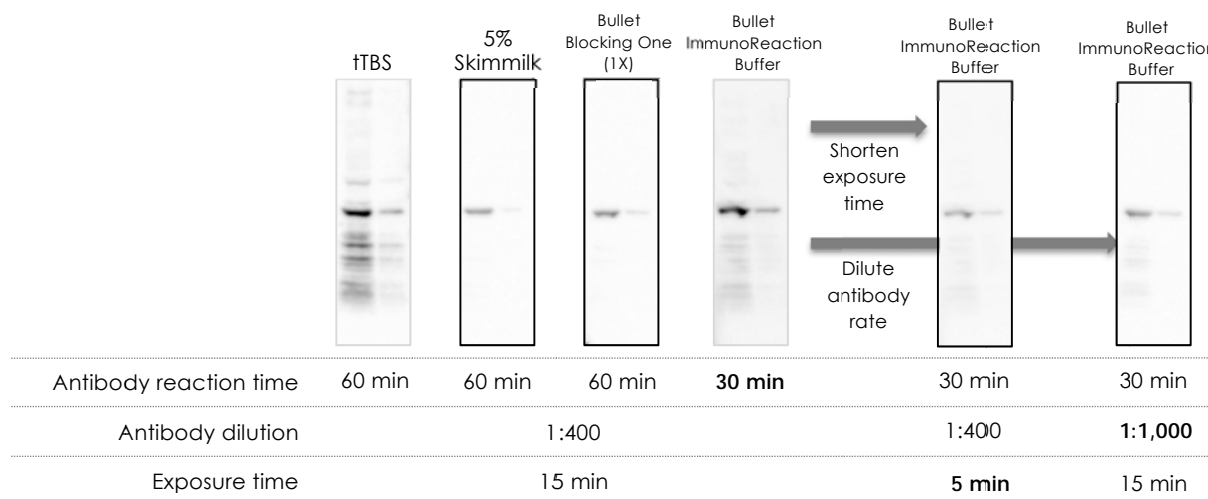
Sample: HeLa cell lysate 10 µg (left), 2 µg (right)

1° antibody: Anti MEK1/2 mouse monoclonal antibody (CST #4694S) 1:1,000

2° antibody: HRP conjugated Anti Mouse IgG antibody (Novus #NB7574) 1:50,000

### <Data 2>

In cases where non-specific bands are reduced with 5% Skimmilk or other blocking reagents as antibody diluent, increased background may be seen with Bullet ImmunoReaction Buffer. Shortening the exposure time or dilution of the antibody may reduce background signals.

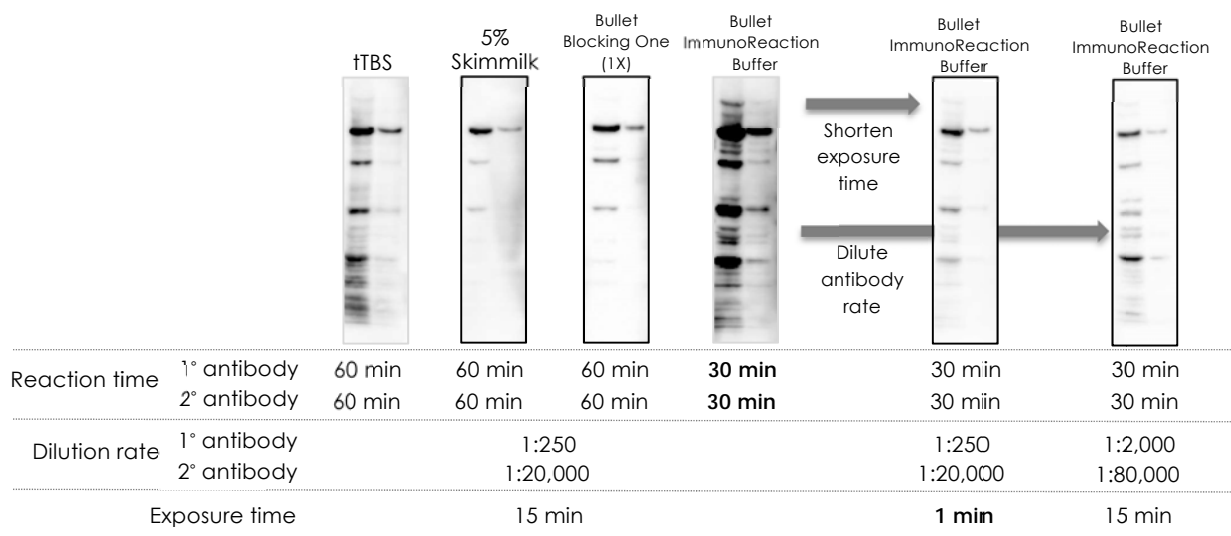


Sample: HeLa cell lysate 10 µg (left), 2 µg (right)

1° antibody: HRP conjugated Anti β-actin human monoclonal antibody (Bio Rad #HCA147P)

<Data 3>

In cases where non-specific bands are reduced with 5% Skimmilk or other blocking reagents as antibody diluent, increased background may be seen with Bullet ImmunoReaction Buffer. Shortening the exposure time or dilution of the antibody may reduce background signals.



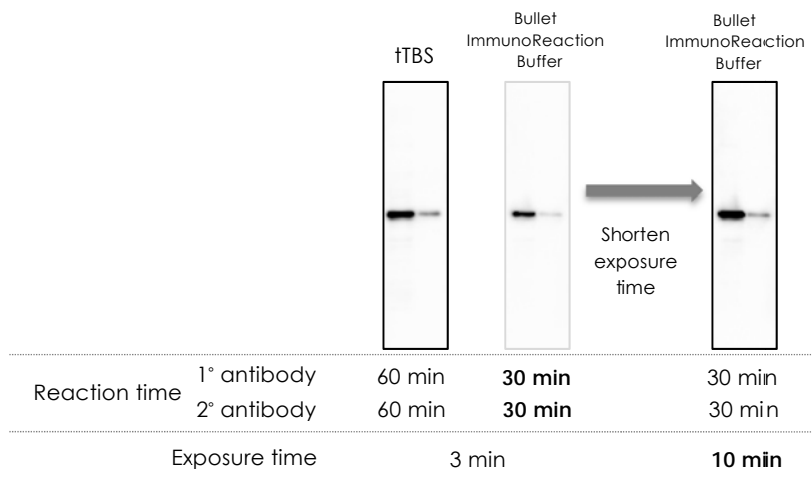
Sample: HeLa cell lysate 10 µg (left), 2 µg (right)

1° antibody: Anti ROCK2 mouse monoclonal antibody (Santa Cruz #sc-398519)

2° antibody: HRP conjugated Anti Mouse IgG antibody (Novus #NB7574)

<Data 4>

In rare cases, there may be insufficient reactivity, resulting in faint signal. Optimal results may be obtained by prolonging the exposure time.



Sample: HeLa cell lysate 2 µg (left), 0.4 µg (right)

1° antibody: Anti β-actin mouse monoclonal antibody (MBL #M177-3) 1:10,000

2° antibody: HRP conjugated Anti Mouse IgG antibody (GE Healthcare #NA-931) 1:20,000