

Blocking Reagents

PRODUCT

Santa Cruz Biotechnology offers a range of Blocking Reagents for use in Western blotting and ELISA applications. These blocking buffers are supplied as lyophilized powders in single-use bottles. Two different pre-mixed blocking buffers are available: TBS Blotto A and TBS Blotto B. Blotto A solution contains 5% non-fat dry milk and 0.05% Tween-20, and is recommended as a blocking reagent for general Western blotting applications. Blotto B solution contains 1% non-fat dry milk, 1% blocking reagent and 0.05% Tween-20, and is recommended as a blocking reagent for Western blotting with phospho-specific antibodies. Blocking buffers are supplied as lyophilized powders in single-use bottles. Tween-20 is included in a separate vial in liquid form. Each of the lyophilized blocking buffers makes a 1X solution when reconstituted to the final volume in deionized water.

Santa Cruz Biotechnology now offers our new UltraCruz® Blocking Reagent for use in immunohistochemistry, immunofluorescence and Western blotting research applications. UltraCruz® Blocking Reagent is a proprietary buffer that is an animal-free alternative to sera, BSA or non-fat dry milk. UltraCruz® Blocking Reagent is provided as a 100 ml ready-to-use solution for blocking and dilution of antibodies.

STORAGE

Store unused TBS Blotto B at 4° C.

Store UltraCruz® Blocking Reagent at 4° C.

Store unused, dry Blotto and TBS Blotto A, and unused Tween-20 solution at room temperature.

After reconstituting dry blocking buffers in water, it is recommended that they be used immediately. Any unused solution may be stored at 4° C for up to two days.

PROCEDURE

The following procedure applies to TBS Blotto A and TBS Blotto B.

- Dissolve the entire contents of the blocking buffer bottle in deionized water, adding powder to water slowly while stirring.
- Bring solution to a final volume of 500 ml. Mix well.
- Add the entire contents of the Tween-20 vial, carefully transferring with a pipette.
- Continue to mix until all materials are dissolved.

Reconstituted buffers may be used as blocking solutions in Western blotting applications.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

RESEARCH USE

For research use only; not for use in diagnostic procedures.

SELECT PRODUCT CITATIONS

1. Chung, E., et al. 1999. Synchronization of the G₁/S transition in response to corneal debridement. *Amer. J. Hum. Gen.* 40: 1952-1958.
2. Planz, O., et al. 2003. Borna disease virus nucleoprotein interacts with the Cdc2-Cyclin B1 complex. *J. Virol.* 77: 11186-11192.
3. Heaton, M.B., et al. 2003. Ethanol effects on neonatal rat cortex: comparative analyses of neurotrophic factors, apoptosis-related proteins, and oxidative processes during vulnerable and resistant periods. *Brain Res. Dev. Brain Res.* 145: 249-262.
4. Mangino, M.J., et al. 2004. Poly(ADP-ribose) polymerase and renal hypothermic preservation injury. *Am. J. Physiol. Renal Physiol.* 286: 838-847.
5. Mangino, M.J., et al. 2006. Lipoxin biosynthesis in inflammatory bowel disease. *Prostaglandins Other Lipid Mediat.* 79: 84-92.
6. Lodewyckx, L., et al. 2012. Tight regulation of wingless-type signaling in the articular cartilage-subchondral bone biomechanical unit: transcriptomics in Frzb-knockout mice. *Arthritis Res Ther.* 14: R16.
7. Pasini, L., et al. 2015. TrkA is amplified in malignant melanoma patients and induces an anti-proliferative response in cell lines. *BMC Cancer* 15: 777.
8. Vallianou, I., et al. 2016. Hepatitis C virus suppresses hepatocyte nuclear factor 4a, a key regulator of hepatocellular carcinoma. *Int. J. Biochem. Cell Biol.* 78: 315-326.

BLOCKING REAGENTS

| PRODUCT | CAT. # | DESCRIPTION | AMOUNT |
|-----------------------------|--------------------|---|----------------|
| UltraCruz® Blocking Reagent | sc-516214 | Animal-free alternative to sera, BSA or non-fat dry milk. Recommended for use in immunohistochemistry, immunofluorescence and Western blotting research applications. | 100 ml |
| Blotto, non-fat dry milk | sc-2324 sc-2325 | Blocking buffer supplied as lyophilized powder in single-use bottle, containing Santa Cruz Biotechnology immunoanalytical grade Blotto. | 250 g 500 g |
| TBS Blotto A | sc-2333 | Blocking buffer supplied as lyophilized powder in single-use bottle, containing Santa Cruz Biotechnology immunoanalytical grade Blotto. Solution contains 5% milk and 0.05% Tween-20. | 500 ml |
| TBS Blotto B | sc-2335 | Recommended when using with phospho-specific antibodies. Blocking buffer supplied as lyophilized powder in single-use bottle, containing Santa Cruz Biotechnology immunoanalytical grade Blotto. Solution contains 1% milk, 1% blocking reagent and 0.05% Tween-20. | 500 ml |
| Tween-20 | sc-29113 | Tween-20 is a non-ionic surfactant, useful for solubilizing membrane proteins during isolation. Tween-20 may also help to prevent non-specific antibody binding and function as a blocking agent in immunoblotting assays. | 500 ml |