

# 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<sup>®</sup> Blocking Reagent for use in immunohistochemistry, immunofluorescence and Western blotting research applications. UltraCruz<sup>®</sup> Blocking Reagent is a proprietary buffer that is an animal-free alternative to sera, BSA or non-fat dry milk. UltraCruz<sup>®</sup> 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<sup>®</sup> 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](http://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 G<sub>1</sub>/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 <sup>®</sup> 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