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A Geno Technology, Inc. (USA) brand name

# **Superior<sup>™</sup> Blocking Buffer**

### (Cat. # 786-658, 786-659, 786-660, 786-661)



#### **INTRODUCTION**

Superior<sup>™</sup> Blocking Buffer contains a proprietary antigenically non-determinant protein for blocking non-specific sites during ELISA, membrane blotting, immunohistochemistry and other applications. Superior<sup>™</sup> Blocking Buffer uses a non-serum protein and does not contain biotin or other animal source proteins to interfere with immuno-complexes. Superior<sup>™</sup> Blocking Buffer is ideal for a high signal to background ratio in most system. Superior<sup>™</sup> Blocking Buffer is suitable for assays that use avidin/streptavidin systems.

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Cat. #	Description	Size
786-658	Superior <sup>™</sup> Blocking Buffer in TBS (Tris-buffered saline at pH 7.5)	500ml
786-659	Superior <sup>™</sup> Blocking Buffer in TBST (Tris-buffered saline at pH 7.5 with 0.05% Tween <sup>®</sup> -20)	
786-660	Superior <sup>™</sup> Blocking Buffer in PBS (Phosphate-buffered saline at pH 7.5)	500ml
786-661	Superior <sup>™</sup> Blocking Buffer in PBST (Phosphate-buffered saline at pH 7.5 with 0.05% Tween <sup>®</sup> -20)	500ml

#### **STORAGE CONDITIONS**

Shipped at ambient conditions, upon arrival store at 4°C.

#### **IMPORTANT**

- For optimal blocking, do NOT dilute the Superior<sup>™</sup> Blocking Buffer.
- The efficacy of blocking agents varies from application to application, so we
  recommend empirical testing of blocking buffer and optimization of procedure to
  increase sensitivity and prevent nonspecific signal and cross-reaction between
  blocking agent and antibody.
- Use of detergent in blocking buffers is not required for all applications, however, addition of 0.05% Tween<sup>®</sup>-20 often improves blocking. Use only high quality ultra pure grade Tween<sup>®</sup>-20, we recommend our Proteomic Grade Tween<sup>®</sup>-20 solution (Cat. # DG011, DG012, DG511), which is purified to remove peroxide and carbonyls contaminants that may interfere in some applications. Do not add additional detergent to Superior<sup>™</sup> Blocking Buffer in TBST (Cat. # 786-659) or Superior<sup>™</sup> Blocking Buffer in PBST (Cat. # 786-661) as these have optimal Tween<sup>®</sup>-20.
- 10-fold diluted Superior<sup>™</sup> Blocking Buffer containing 0.05% Tween<sup>®</sup>-20 may be used to dilute antibodies to enhance the sensitivity of the signal.
- Superior<sup>™</sup> Blocking Buffer may be used as stabilizer of proteins coated on ELISA plates for storage.

#### PROCEDURE FOR BLOCKING WESTERN BLOTTING MEMBRANES

- Following protein transfer, transfer the membrane to a suitable size tray.
   NOTE: Superior<sup>™</sup> Blocking Buffer is suitable for PVDF and nitrocellulose membranes.
- 2. Add enough Superior<sup>™</sup> Blocking Buffer to completely cover the membrane.
- 3. Incubate for 30-120 minutes at room temperature with agitation.
- 4. Discard blocking buffer and continue with downstream Western blotting steps. NOTE: For washing steps, use of femtoTBST<sup>™</sup> (Cat.# 786-161) or femtoPBST<sup>™</sup> (Cat. # 786-162) will minimize the washing out of immune-complexes and aid in the generation of cleaner backgrounds resulting in a higher signal to noise ratio, a common problem associated with classical TBST and PBST buffers used for washing.

#### **PROCEDURE FOR BLOCKING ELISA PLATE**

- 1. Apply sample to the ELISA plates and incubate for 1-2 hours at room temperature.
- Apply 300µl of Superior<sup>™</sup> Blocking Buffer to each well. Immediately empty the well by aspiration or inversion. Repeat this step twice more. Incubation is not required, however plates may be incubated without any detrimental effects.
- 3. Continue the downstream ELISA steps. NOTE: For washing steps, use of femtoTBST<sup>™</sup> (Cat.# 786-161) or femtoPBST<sup>™</sup> (Cat. # 786-162) will minimize the washing out of immune-complexes and aid in the generation of cleaner backgrounds resulting in a higher signal to noise ratio, a common problem associated with classical TBST and PBST buffers used for washing.
- 4. For storage of coated plates, invert plates and allow plates to dry completely before sealing in a plastic bag with desiccant.

#### PROCEDURE FOR BLOCKING TISSUE FOR IMMUNOHISTOCHEMISTRY

- 1. Incubate tissue in blocking buffer for 30 minutes at room temperature.
- 2. Remove the blocking buffer from the tissue.
- 3. Without rinsing the tissue, continue with immunohistochemistry downstream procedures for detection

#### **RELATED PRODUCTS**

Download our Assay Development Handbook.



http://info.gbiosciences.com/complete-assay-development-handbook For other related products, visit our website at <u>www.GBiosciences.com</u> or contact us.

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