

Instructions For Use BBK-IFU

Rev. Date: April 30, 2019

Revision: 4

Page 1 of 2

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Fax (435) 755-0015 - www.scytek.com

Biotin Blocking Kit

Description:

Biotin Blocking Kit has been developed to use with immunohistochemical (IHC) techniques for the reduction of nonspecific background staining due to endogenous biotin. Biotin is a coenzyme of decarboxylase. It is present in many tissues, such as liver, pancreas, kidney, and intestine. Endogenous biotin can interfere with staining systems that employ the use of biotin. This product is designed to effectively eliminate the interfering tendencies of endogenous biotin.

Uses/Limitations: Not to be taken internally.

For In-Vitro Diagnostic use only.

Histological applications.

Do not use if reagent becomes cloudy. Do not use past expiration date. Use caution when handling reagent.

Non-Sterile.

Control Tissue: Tissue known to exhibit high levels of endogenous biotin. May be liver, pancreas, kidney, and intestine.

No Biotin Block

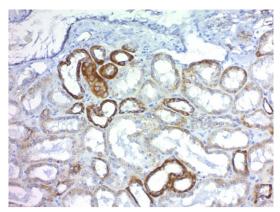


Figure 1. Endogenous biotin detected in human kidney by incubating in HRP-streptavidin followed by a DAB chromogen. No Antibodies were used.

Using Biotin Block

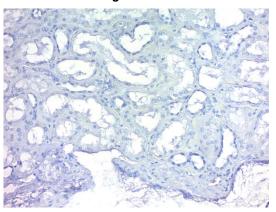
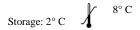


Figure 2. Endogenous Biotin in a serial section of human kidney completely blocked. Subsequent incubation of HRP-streptavidin and chromogen was still performed.











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Page 2 of 2

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Availability: <u>Item #</u> <u>Volume</u>

BBK030 15mls each. BBK120 60mls each

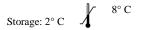
Storage: Store both components at 2-8°C.

Procedure:

- 1. Incubate tissue section with Biotin Block Part A (BBA) for 15 minutes at either room temperature or 37° C prior to application of the primary antibody.
- 2. Rinse twice in buffer.
- 3. Incubate tissue section with Biotin Block Part B (BBB)for 15 minutes at either room temperature or 37° C prior to application of the primary antibody.
- 4. Rinse twice in buffer.
- 5. Apply primary antibody and continue staining as usual.

Product Specific Literature References:

- 1. Wilhide, Michael E., James D. Feller, Birong Li, Ahmad Z. Mohamed, Brian Becknell, Ashley R. Jackson, Kirk M. McHugh, and Susan E. Ingraham. "Renal Epithelial MiR-205 Expression Correlates with Disease Severity in a Mouse Model of Congenital Obstructive Nephropathy." *Pediatric Research* 80, no. 4 (October 2016): 602–9. https://doi.org/10.1038/pr.2016.121.
- Becknell, Brian, Ashley R. Carpenter, Jordan L. Allen, Michael E. Wilhide, Susan E. Ingraham, David S. Hains, and Kirk M. McHugh. "Molecular Basis of Renal Adaptation in a Murine Model of Congenital Obstructive Nephropathy." PLOS ONE 8, no. 9 (September 4, 2013): e72762. https://doi.org/10.1371/journal.pone.0072762.
- 3. Becknell, Brian, John David Spencer, Ashley R. Carpenter, Xi Chen, Aspinder Singh, Suzanne Ploeger, Jennifer Kline, et al. "Expression and Antimicrobial Function of Beta-Defensin 1 in the Lower Urinary Tract." PLOS ONE 8, no. 10 (October 21, 2013): e77714. https://doi.org/10.1371/journal.pone.0077714.
- 4. Spencer, John D., Andrew L. Schwaderer, Julianne D. DiRosario, Kirk M. McHugh, Glen McGillivary, Sheryl S. Justice, Ashley R. Carpenter, Peter B. Baker, Jürgen Harder, and David S. Hains. "Ribonuclease 7 Is a Potent Antimicrobial Peptide within the Human Urinary Tract." Kidney International 80, no. 2 (July 2, 2011): 174–80. https://doi.org/10.1038/ki.2011.109.



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