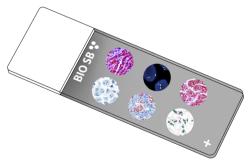


Desmoglein-3 **Control Slides**







Intended Use

For In Vitro Diagnostic Use.

Summary and Explanation

Desmoglein 3 is a protein that is encoded by the DSG3 gene on Chromosome 18. Desmoglein 3 is a calcium-binding transmembrane glycoprotein component of desmosomes in vertebrate epithelial cells. Currently, four desmoglein subfamily members have been identified and all are members of the cadherin cell adhesion molecule superfamily. This protein has been identified as the autoantigen of the autoimmune skin blistering disease pemphigus vulgaris.

Desmoglein 3 has been cited as a superior marker for Lung Squamous Cell Carcinomas, and helps distinguish lung squamous cell carcinoma cases from lung adenocarcinoma. Studies have also shown that a panel consisting of Desmoglein-3 utilized with Napsin A can be a useful immunohistochemical marker for differentiation of lung squamous cell carcinoma and adenocarcinoma from other subtypes. Lung cases that are typically positive for Desmoglein 3 tend to have a poor clinical outcome.

Presentation

Five slides of Desmoglein-3 positive tissues, each mounted on Hydrophilic Plus Slides, provided in a plastic mailer.

Catalog No.	Quantity
BSB-9162-CS	5 slides
BSB 2795	5 slides
BSB 2900	5 slides

Storage Store at 20-25°C

Precautions

- 1. For professional users only. Results should be interpreted by a qualified medical professional.
- 2. Ensure proper handling procedures are used with this reagent.
- 3. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents.
- 4. Dispose of unused solution with copious amounts of water.
- 5. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
- 8. For additional safety information, refer to the Safety Data Sheet for this product.
- 9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

Stability

This product is stable up to the expiration date on the product label. Do not use the after expiration date listed on the package label.

IHC Protocol

- 1. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
- 2. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

- 3. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
- 4. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
- 5. Wash slides with ImmunoDNA washer or DI water.
- 6. Continue IHC staining protocol. Wash slides between each step with ImmunoDNA washer solution.

Abbreviated Immunohistochemical Protocol

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Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP	
Peroxidase/AP Blocker	5 min.	5 min.	5 min	
Primary Antibody	30-60 min.	30-60 min.	30-60 min.	
1st Step Detection	10 min.	30-45 min.	15 min.	
2nd Step Detection	10 min.	Not Applicable	15 min.	
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.	
Counterstain / Coverslip	Varies	Varies	Varies	

Abbreviated IF Protocol

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Step	Incubation Time	
Rinse slides in IF wash buffer	5 minutes	
Drain and wipe excess IF wash buffer off slide		
Conduct remaining steps in the dark		
Apply Antibody	30-60 minutes	
Rinse with 3 changes of IF wash buffer	3x15 minutes each	
Coverslip with IF mounting medium		

Mounting Protocols

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent based resin such as PermaMounter (BSB 0094-0097), refer to PI0174 or PI0097.

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a qualified medical professional.

References

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- 3. Huang CC, et al. Laryngoscope. 2010 Jan; 120 (1):26-9.
- 4. Savci-Heijink CD, et al. Am J Pathol. 2009 May; 174(5):1629-37. Epub 2009 Mar 26.
- 5. Wong MP, et al. Pathology. 2008 Oct; 40(6):611-6.
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