

## DAB Chromogen

**Description:**

3,3'Diaminobenzidine (DAB) is a widely used chromogen for immunohistochemical staining and immunoblotting. When in the presence of peroxidase enzyme, DAB produces a brown precipitate that is insoluble in alcohol. A DAB substrate solution containing Hydrogen peroxide is required to mix with this product (ScyTek Cat#(s) ACU, ACC). The standard working dilution is 50ul (0.9mg) of DAB Chromogen per 1ml of DAB Substrate, although the ratio can be adjusted as desired, the use of liquid components reduces some risks associated with handling powders (ie. dust inhalation), and eliminates waste which often results from using tablets that require a predetermined final volume. Once the two components are combined, the reagent can be used for up to six hours, making it ideal for automated stainers.

**Uses/Limitations:**

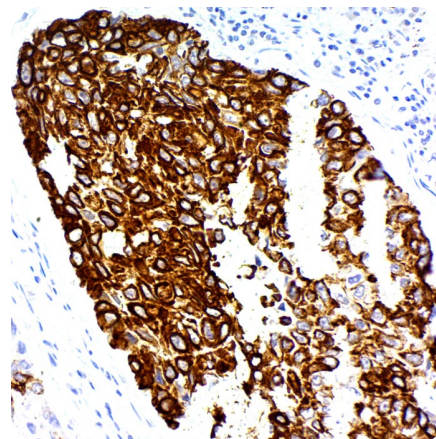
Not to be taken internally.  
For In-Vitro Diagnostic Use only.  
Hematologic applications.  
Do not use if reagents become cloudy.  
Do not use past expiration date.  
Use caution when handling reagents.  
Non-Sterile.

**Control Tissue:**

Any well-fixed frozen or FFPE tissue.

**Availability:**

<u>Item #</u>	<u>Volume</u>
ACB030	30ml
ACB060	60ml
ACB125	125ml
ACB500	500ml
ACB999	1000ml



Lung Squamous Cell Carcinoma Stained with ScyTek's Cytokeratin 5; Clone EP42 (Cat#A00139) and an IHC protocol containing ScyTek's DAB Chromogen (ACB)


**Storage:**


Store at 2-8°C. Stable for 18 months from the date of manufacture.



**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**


**Precautions:**

DAB Chromogen: Contains Diaminobenzidine in buffer. DAB is a suspected carcinogen. Avoid contact with skin and eyes. Reagent is acidic and can cause burns if skin contact occurs. Handle with care and dispose of according to regulations.

Storage: 2° C  8° C

 ScyTek Laboratories, Inc.  
205 South 600 West  
Logan, UT 84321  
U.S.A.

  
Emergo Europe  
Prinsessegracht 20  
2514 AP The Hague, The Netherlands

## Instructions For Use ACB-IFU

Rev. Date Nov. 4, 2021

Revision: 2

Page 2 of 3

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

### Required but not Provided:

DAB Substrate Solution (ScyTek Cat#s ACU, ACC)

### Procedure:

1. Rinse slide in deionized water prior to application of DAB mixture.
2. Combine 50-80µl of DAB Chromogen with 1ml of DAB Substrate and apply to tissue for 5 minutes.


NOTE: Range = 50-80µl of DAB Chromogen / 1 ml of DAB Substrate. 50µl /ml produces optimal staining quality, 80µl/ml produces maximum sensitivity. Combined mixture may be used for up to six hours.


OPTIONAL: For additional sensitivity, add 20µl of DAB Enhancer (cat.# ACM030, not included) to each 1ml of mixed solution.

3. Rinse slide using deionized water.
4. Apply mixture a second time and incubate for another 5 minutes.
5. Rinse slide in two changes of deionized water.
6. Counterstain as desired.
7. Dehydrate through graded alcohol, clear and coverslip in synthetic medium.

### References:

1. Keiichi Abe, Ryo Shimada, Yoshikazu Okada & Kazuhiko Kibayashi (2016) Traumatic brain injury decreases serotonin transporter expression in the rat cerebrum, *Neurological Research*, 38:4, 358-363, DOI: 10.1080/01616412.2015.1110402
2. Tominaga T, Shimada R, Okada Y, Kawamata T, Kibayashi K (2019) Senescence-associated-β-galactosidase staining following traumatic brain injury in the mouse cerebrum. *PLoS ONE* 14(3): e0213673. <https://doi.org/10.1371/journal.pone.0213673>
3. Furat Rençber, Selenay, Sema Kurnaz Ozbek, Ceyla Eraldemir, Zehra Sezer, Tugba Kum, Sureyya Ceylan, and Elif Guzel. "Effect of Resveratrol and Metformin on Ovarian Reserve and Ultrastructure in PCOS: An Experimental Study." *Journal of Ovarian Research* 11, no. 1 (June 29, 2018): 55. <https://doi.org/10.1186/s13048-018-0427-7>.
4. Fontes, Klaus N., Adriana Cabanelas, Flavia F. Bloise, Cherley Borba Vieira de Andrade, Luana L. Souza, Marianna Wilieman, Isis H. Trevenzoli, et al. "Differential Regulation of Thyroid Hormone Metabolism Target Genes during Non-Thyroidal Illness Syndrome Triggered by Fasting or Sepsis in Adult Mice." *Frontiers in Physiology* 8 (2017). <https://doi.org/10.3389/fphys.2017.00828>.
5. Yazici, Mutlu Uysal, Diclehan Orhan, Gulsev Kale, Nesrin Besbas, and Seza Ozen. "Studying IFN-Gamma, IL-17 and FOXP3 in Pediatric Lupus Nephritis." *Pediatric Nephrology* 29, no. 5 (May 1, 2014): 853–62. <https://doi.org/10.1007/s00467-013-2695-1>.

Storage: 2° C  8° C

 ScyTek Laboratories, Inc.  
205 South 600 West  
Logan, UT 84321  
U.S.A.

CE


IVD

EC REP

Emergo Europe  
Prinsessegracht 20  
2514 AP The Hague, The Netherlands

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

6. Liang, Jing D, Jingang Liu, Phadungehom McClelland, and Marcelle Bergeron. "Cellular Localization of BM88 mRNA in Paraffin-Embedded Rat Brain Sections by Combined Immunohistochemistry and Non-Radioactive in Situ Hybridization." Brain Research Protocols 7, no. 2 (June 1, 2001): 121–30. [https://doi.org/10.1016/S1385-299X\(01\)00050-2](https://doi.org/10.1016/S1385-299X(01)00050-2).

Storage: 2° C  8° C



ScyTek Laboratories, Inc.  
205 South 600 West  
Logan, UT 84321  
U.S.A.



EC REP

Emergo Europe  
Prinsessegracht 20  
2514 AP The Hague, The Netherlands