



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

# DAB Substrate (High Contrast)

# **Description:**

DAB Substrate (High Contrast) is a solution specifically designed for optimal signal intensity and contrast. When in the presence of peroxidase enzyme and DAB Chromogen, the substrate helps create a brown precipitate that is insoluble in alcohol. The standard working dilution is 50ul (0.9mg) of DAB Chromogen per 1ml of DAB Substrate (High Contrast), 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: Item # ACU250 ACU500 ACU999

Volume 250ml 500ml 1000ml



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

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

### Ordering Information and Current Pricing at 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.

DAB Substrate: Contains Hydrogen Peroxide in buffer. Avoid contact with skin and eyes.





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# **Required but not Provided:**

DAB Chromogen (ScyTek Cat#: ACB)

# 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 Rencber, 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. Georgiev, Georgi P, Boycho Landzhov, Iva N Dimitrova, Svetoslav Slavchev, Lina Malinova, Yuliyan Kartelov, Dessislava Ankova, and Wladimir Ovtscharoff. "LIGHT MICROSCOPIC AND IMMUNOHISTOCHEMICAL STUDY OF THE MEDIAL COLLATERAL LIGAMENT EPILIGAMENT IN RAT KNEE," n.d., 8.

5. Georgiev, Georgi P, Boycho Landzhov, Iva N Dimitrova, Svetoslav Slavchev, Lina Malinova, and Wladimir Ovtscharoff. "IMMUNOHISTOCHEMICAL STUDY DURING EARLY HEALING OF THE MEDIAL COLLATERAL LIGAMENT EPILIGAMENT IN RAT KNEE MODEL," n.d., 8.





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