

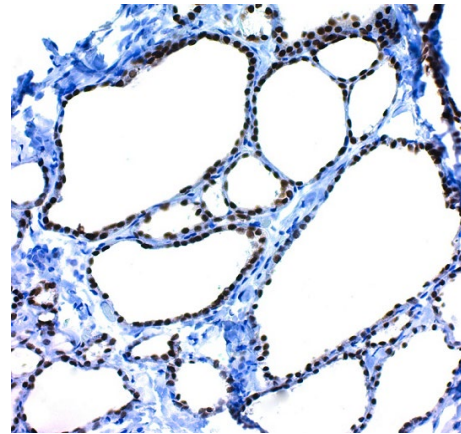
# Citrate Plus (10X) HIER Solution

**Description:** Citrate Plus (10X) HIER Solution is a unique citrate buffer designed to significantly enhance immunohistochemical staining with many commercially available primary antibodies. Diluted 1:10 with deionized or distilled water, this product is easy to use and highly effective. Citrate Plus (10X) can be used in a vegetable steamer, autoclave, or pressure cooker. However, for optimal results we recommend the autoclave or pressure cooker.

**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.

<b>Availability:</b>	<u>Item #</u>	<u>Volume</u>
	CPL500	500ml
	CPL999120	1000ml


**Storage:** Store at 2-8°C. Solution is stable for 24 months after date of manufacture.  
Do not re-use 1X working solution.




Human Thyroid stained with a TTF-1 antibody within an IHC procedure. Citrate Plus (10X) HIER Solution was used for antigen retrieval

**Procedure: (Autoclave/Pressure Cooker).**

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. In an autoclavable (Coplin) staining jar, combine 5 ml of Citrate Plus and 45 ml of deionized water. **Note:** Always make up a fresh 1X working solution per protocol. Do not re-use.
3. Loosely cap the coplin jar and place in a pressure cooker for 10 minutes to warm solution (prior to submersion of slides).
4. Carefully remove jar from the pressure cooker, remove cap and submerge slides. Recap loosely and return jar to pressure cooker.
5. Turn on heat and allow pressure to rise to 20-25 PSI.
6. Maintain pressure at 20-25 PSI for 5 minutes.
7. Turn off heat source and allow pressure to return to ambient.
8. Carefully remove the jar from the pressure cooker and remove the lid. Allow the solution to return to ambient temperature. If desired, the jar with the lid removed may be placed in a cool-water bath to reduce wait time.
9. Once cool, remove slides and rinse with deionized water.
10. Place slide in buffer and continue as desired.

Storage: 2° C  8° C



ScyTek Laboratories, Inc.  
205 South 600 West  
Logan, UT 84321  
435-755-9848  
U.S.A.

**CE** 





Emergo Europe  
Westervoortsedijk 60  
6827 AT Arnhem, 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)

**References:**

1. Alshaarawy, Omayma, Emily Kurjan, Nguyen Truong, and L. Karl Olson. "Diet-Induced Obesity in Cannabinoid-2 Receptor Knockout Mice and Cannabinoid Receptor 1/2 Double-Knockout Mice." *Obesity* 27, no. 3 (2019): 454–61. <https://doi.org/10.1002/oby.22403>.
2. Contreras, G. Andres, Kyan Thelen, Nadia Ayala-Lopez, and Stephanie W. Watts. "The Distribution and Adipogenic Potential of Perivascular Adipose Tissue Adipocyte Progenitors Is Dependent on Sexual Dimorphism and Vessel Location." *Physiological Reports* 4, no. 19 (October 2016): e12993. <https://doi.org/10.14814/phy2.12993>.
3. Geekiyanage, Hirosha, Aditi Upadhye, and Christina Chan. "Inhibition of Serine Palmitoyltransferase Reduces A $\beta$  and Tau Hyperphosphorylation in a Murine Model: A Safe Therapeutic Strategy for Alzheimer's Disease." *Neurobiology of Aging* 34, no. 8 (August 1, 2013): 2037–51. <https://doi.org/10.1016/j.neurobiolaging.2013.02.001>.
4. Jadhav, Vaishnavi, Qianyi Luo, James M. Dominguez 2nd, Jude Al-Sabah, Brahim Chaqour, Maria B. Grant, and Ashay D. Bhatwadekar. "Per2-Mediated Vascular Dysfunction Is Caused by the Upregulation of the Connective Tissue Growth Factor (CTGF)." *PLOS ONE* 11, no. 9 (September 23, 2016): e0163367. <https://doi.org/10.1371/journal.pone.0163367>.
5. Van Vaerenbergh, Inge, Ramsey McIntire, Leentje Van Lommel, Paul Devroey, Linda Giudice, and Claire Bourgain. "Gene Expression during Successful Implantation in a Natural Cycle." *Fertility and Sterility* 93, no. 1 (January 1, 2010): 268.e15-268.e18. <https://doi.org/10.1016/j.fertnstert.2009.08.057>.

Storage: 2° C  8° C



ScyTek Laboratories, Inc.  
205 South 600 West  
Logan, UT 84321  
435-755-9848  
U.S.A.

CE 

EC REP

Emergo Europe  
Westervoortsedijk 60  
6827 AT Arnhem, The Netherlands