



# NeoUltra Retrieval Solution (20x)

NB-23-00178-2

NB-23-00178-3

NB-23-00178-4

NB-23-00178-5

## NeoUltra Retrieval Solution (20x)

#Cat: NB-23-00178-2	Size: 1L
#Cat: NB-23-00178-3	Size: 125ml
#Cat: NB-23-00178-4	Size: 50ml
#Cat: NB-23-00178-5	Size: 500ml

Storage: 2-8°C

### Intended use:

**NeoUltra Retrieval Solution** is a revolutionary 3-in-1 pretreatment and antigen retrieval system intended for use in immunohistochemistry. This reagent is designed to deparaffinize, rehydrate, and unmask (HIER) formalin-fixed, paraffin-embedded tissue sections in one simple step prior to IHC staining using NeoBiotech Lab's Polymer Detection Systems.

This reagent can also be used as a conventional antigen retrieval buffer following traditional deparaffinization/hydration methods.

### Kit format:

Liquid form (20X Concentrate).

Catalog Number	Description	Size
NB-23-00178-5	NeoUltra Retrieval Solution (20x)	500mL
NB-23-00178-4	NeoUltra Retrieval Solution (20x)	50mL
NB-23-00178-3	NeoUltra Retrieval Solution (20x)	125mL
NB-23-00178-2	NeoUltra Retrieval Solution (20x)	1000mL

### Materials required:

1. Electric Pressure Cooker (we recommend the Cuisinart CPC-600 1000-Watt 6-Quart Electric Pressure Cooker) or Laboratory grade water bath
2. One metal rack
3. Two IHC staining dishes
4. Distilled water
5. PBS-Tween20 wash buffer

## **Electric pressure cooker method:**

1. Prepare Ready-to-use (RTU) solution by diluting the concentrate 1:20 in distilled water.
2. Place up to 24 formalin-fixed, paraffin-embedded tissue slides in a slide rack.
3. Place slide rack into the first staining dish and fill with approximately 200 ml of RTU solution. (Ensure tissue slides are immersed in RTU solution). Prepare a second staining dish filled with approximately 200 ml of RTU solution. The second staining dish will be used later on as a rinse solution. Staining dish size may vary, ensure sufficient quantity of RTU solution to cover the tissue slides.
4. Place 1000 ml of distilled water in the base of pressure cooker unit and place a metal rack into the water. Make sure the bottom of the staining dish is not in direct contact with the bottom of the pressure cooker.
5. Place both staining dishes inside the pressure cooker. Lock pressure cooker lid in place. Set the pressure timer to 10-15 minutes. Make sure the vent switch is in the closed position. The optimal incubation time should be determined by the user.
6. Timer will start to count down when the correct pressure and temperature is reached.
7. After the timer finishes, turn the vent switch to release the pressure.
8. When all the pressure is released and you may safely remove the lid.
9. Remove both staining dishes from the pressure cooker. Wear proper safety equipment when performing this step.
10. Agitate the slide rack for 5 seconds and transfer the slide rack from the first staining dish into the rinse solution within the second staining dish using forceps.
11. Agitate slides within the rinse solution for 5-10 seconds and let sit at room temperature for at least 5 minutes.
12. Remove the slide rack from the second staining dish. Dip into PBS-Tween20 wash buffer at room temperature and proceed with your IHC protocol.

## **Water bath method:**

1. Prepare Ready-to-use (RTU) solution by diluting the concentrate 1:20 in distilled water.
2. Fill the first staining dish with approximately 200 ml of RTU solution. Prepare a second staining dish filled with approximately 200 ml of RTU solution. The second staining dish will be used later on as a rinse solution. Staining dish size may vary, ensure sufficient quantity of RTU solution to cover the tissue slides.
3. Place both staining dishes into the water bath and heat it to 97°C.

4. Place up to 24 formalin-fixed, paraffin-embedded tissue slides in a slide rack.
5. Place the slide rack into the first staining dish (ensure tissue slides are immersed in pre-heated RTU solution).
6. Incubate at 97°C for 20-40mins. The optimal incubation time should be determined by the user.
7. Remove both staining dishes from the water bath. Wear proper safety equipment when performing this step.
8. Agitate the slide rack for 5 seconds and transfer the slide rack from the first staining dish into the rinse solution within the second staining dish using forceps.
9. Agitate slides within the rinse solution for 5-10 seconds and let sit at room temperature for at least 5 minutes.
10. Remove the slide rack from the second staining dish. Dip into PBS-Tween20 wash buffer at room temperature and proceed with your IHC protocol.

#### **Alternative protocol(s):**

**NeoUltra Retrieval Solution** is also applicable for HIER using manual pressure cookers (we recommend electric one for more consistent results) or steamers as heating sources. The optimal conditions should be determined by the user.

#### **Precaution:**

Wear gloves, proper safety equipment, and take other necessary laboratory safety precautions.

#### **Storage:**

Store at 4°C or room temperature.

**For research use only.**