

# Immunohistochemistry Protocol for Keratin Antibodies

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## Abstract

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## Guidelines

- Use with Ultra Streptavidin Detection Kit (SIG-32250) or (SIG-32248)
- Positive control: Normal human skin

## Protocol

### Clear Slides

#### Step 1.

Clear Slides: Removes paraffin and hydrates the tissue.

#### A. Xylene:

5 minutes in each of (3) different 250mL containers

#### B. 100% alcohol

5 minutes in each of (3) different 250mL containers

#### C. 95% alcohol

3 minutes in (1) 250mL container

#### D. 70% alcohol

3 minutes in (1) 250mL container

E. Water

1 minutes in each of (3) different 250mL containers

F. H<sub>2</sub>O<sub>2</sub> (3%)

15 minutes in (1) 250mL container

## Rinse Slides

### Step 2.

Rinse slides with lab grade water.

Note: Lab grade filtered water such as injection grade, cell culture grade, Reverse Osmosis De-ionisation (RODI).

## Antigen Retrieval

### Step 3.

Heat slides in 1X Sodium Citrate solution for 1 minute 25 seconds on high power in microwave.

 DURATION

00:01:25

## Antigen Retrieval

### Step 4.

Reduce to low power and simmer for 10 minutes in microwave.

 DURATION

00:10:00

## Antigen Retrieval

### Step 5.

Remove from microwave and allow slides to cool on the bench top for 10 minutes.

 DURATION

00:10:00

## Antigen Retrieval

### Step 6.

Rinse slides with lab grade water.

### Step 7.

Apply serum block for at least 5 minutes.

Do NOT wash after this step

 DURATION

00:05:00

**Step 8.**

Blot off serum block

**Step 9.**

Apply primary antibody (see recommended dilution from datasheet)

**Step 10.**

Incubate primary antibody 60 minutes at room temperature

 DURATION

01:00:00

**Step 11.**

Rinse slides with 1X PBS

**Step 12.**

Apply USA Linking reagent - 20 minutes incubation

 DURATION

00:20:00

**Step 13.**

Rinse slides with 1X PBS

**Step 14.**

Apply Labeling Reagent - 20 minutes incubation

 DURATION

00:20:00

**Step 15.**

Rinse with 1X PBS

**Step 16.**

Apply chromogen - 5 minutes incubation.

Dilute according to manufacturer's instructions.

AEC Chromogen: 20µL AEC chromogen + 1mL AEC substrate buffer

 DURATION

00:05:00

**Step 17.**

Rinse slides with lab grade water

Coverslip

**Step 18.**

Submerge slides in Mayer's Hematoxylin for 30 seconds

 DURATION

00:00:30

Coverslip

**Step 19.**

Rinse under running lab grade water for 1 minute or until water is clear

 DURATION

00:01:00

Coverslip

**Step 20.**

Submerge slides in Bluing Reagent for 1 minute

 DURATION

00:01:00

Coverslip

**Step 21.**

Rinse under running lab grade water for 1 minute

 DURATION

00:01:00

Coverslip

**Step 22.**

Cover slip slide using Permanent Aqueous Mounting Medium (SIG-31010)

*Note: do not use xylene based mount with AEC Chromogen as it will dissolve the chromogen.*