

# Detection of STEP in Formalin-Fixed, Paraffin-Embedded Mouse Tissue

## **Reagent and Antibody Information**

[1X Wash Buffer](#)

[3% Hydrogen Peroxide](#)

[1% BSA Diluent](#)

[1X Citrate Buffer](#)

[DAB Chromogen](#)

[Hematoxylin](#)

Staining Kit: ImmPRESS Anti-Mouse Ig, Rat adsorbed (peroxidase) Polymer Detection Kit

Vector Laboratories, Inc.

Burlingame, CA 94010

[www.vectorlabs.com](http://www.vectorlabs.com)

1-800-227-6666

Catalog # MP-7422-15

**Note:** This kit contains a pre-dilute blocking serum and polymer reagent.

Primary Antibody: Mouse Monoclonal STEP Antibody

Cell Signaling Technology

Danvers, MA 01923

[www.cellsignal.com](http://www.cellsignal.com)

1-877-616-2355

Catalog # 4396S

Lot # 1

Negative Control Serum: Purified Mouse IgG1 Isotype Control Serum

BD Biosciences

San Jose, CA 95131

[www.bdbiosciences.com](http://www.bdbiosciences.com)

1-855-236-2772

Catalog # 557273

## Staining Procedure

Positive Control Tissue: Brain

Stain Localization: Cytoplasmic

1. Deparaffinize and hydrate slides through the following solutions:

Solution	Repetitions	Time
Xylene	2 times	5 minutes
100% Ethanol	2 times	3 minutes
95% Ethanol	2 times	3 minutes
1X Wash Buffer	2 times	5 minutes

2. Quench endogenous peroxidase by placing slides in 3% hydrogen peroxide for 15 minutes.

3. Rinse the slides in 2 changes of 1X wash buffer for 5 minutes each.

4. Heat-Induced Epitope Retrieval Using The Decloaker

Add 500 ml of distilled water to the pan inside the decloaker.

Place a full rack of slides into a Tissue Tek® container with 200 ml of 1X citrate buffer

(Insert blank slides into any empty slots in the rack to ensure even heating of slides)

Place the container stably inside the pan and decloak for 5 minutes. *Maximum Pressure* \_\_\_\_\_

Depressurize for 10 minutes.

Remove pan top and cool for 10 minutes. *Temperature Before Cooling Slides* \_\_\_\_\_

Rinse the slides in 2 changes of distilled water for 3 minutes each time.

5. Rinse the slides in 2 changes of 1X wash buffer for 5 minutes each.

6. Block with the 2.5% normal horse serum from the ImmPRESS kit for 20 minutes at room temperature.

Lot # \_\_\_\_\_ Exp. Date \_\_\_\_\_

DO NOT RINSE SECTIONS WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY.  
ONLY WIPE EXCESS BLOCK.

7. Apply primary antibody at a 1:1000 dilution. Incubate for 1 hour at room temperature.

Lot # \_\_\_\_\_ Exp. Date \_\_\_\_\_

For negative control slides, dilute mouse IgG1 control serum so that it's IgG1 protein concentration matches that of the primary antibody (if necessary). Then make a 1:1000 dilution. If the concentrations can't be matched using this method, the dilution for the negative reagent may need to be adjusted. Apply the negative and incubate for 1 hour at room temperature.

Lot # \_\_\_\_\_ Exp. Date \_\_\_\_\_

8. Rinse the slides in 2 changes of 1X wash buffer for 5 minutes each.

9. Apply the anti-mouse polymer from the ImmPRESS kit, and incubate for 15 minutes at room

temperature.

Lot # \_\_\_\_\_ Exp. Date \_\_\_\_\_

10. Rinse slides in 2 changes of 1X wash buffer for 5 minutes each.

11. Apply the DAB chromogen. Incubate in the dark for 6 minutes at room temperature.  
(Add 1 drop of DAB per ml of substrate)

Lot # \_\_\_\_\_ Exp. Date \_\_\_\_\_ New Kit: yes / no

12. Rinse the slides in tap water 3 minutes.

13. Counterstain with hematoxylin for 20 seconds.

14. Rinse the slides in tap water until water is clear.

15. Gently agitate slides in 1X wash buffer until the tissues turn blue.

16. Dehydrate through the following solutions:

Solutions	Repetitions	Time
95% Ethanol	1 time	3 minutes
100% Ethanol	3 times	3 minutes
Xylene	2 times	5 minutes

17. Coverslip

*Updated 11/13/12*