

STAT-Q™ STAINING SYSTEM

For No-Wash, Background- Free Rapid IHC & ICC staining of human and animal tissues

For staining MOUSE & RABBIT& RAT Primary Antibodies

60 ml of STAT-Q DAB Staining System:

Product # NB314KLD, approximate 800-1000 slides

20 ml of STAT-Q DAB Staining System:

Product # NB314KLD-20, approximate 200-300 slides

INTRODUCTION

Immunostaining detection systems are used to determine the presence, localization and density of antigen in binding assays. In immunohistochemistry (IHC) and immunocytochemistry (ICC) antigens are visualized by enzyme immunochemical assays.

PRODUCT DESCRIPTION

STAT-Q™ Rapid IHC/ICC staining System is a minimal-wash staining system bio-engineered for No-Background, quick 5-second wash steps and short incubation steps. This staining system is universally applicable to staining Mouse, Rabbit and Rat primary antibodies. This system is further applicable to staining all human tissues and all animal species tissues and cell preparations. This system is ideal for staining all tissues and cells regardless of their method of processing such as paraffin sections, cryostat sections, cytocentrifuge preparations and cell smears.

STAT-Q staining system is designed as a highly sensitive 3-Step system for IHC and ICC staining of human and animal tissues. This system detects mouse, rat and rabbit primary antibodies; The system is designed to be free of background and does not require protein or serum blocking when staining human tissues. However, when staining animal tissues, a 30-minute blocking step with Innovex Background Buster prior to application of primary antibody is highly recommended.

STAT-Q system is designed to eliminate the need for re-titration of primary antibodies when switching over to this system. When employing STAT-Q system, no adjustment of currently employed primary antibody dilutions is required; Simply replace STAT-Q kit in place of the current detection system. In addition to shorter incubation steps, STAT-Q system also offers users the choice of increased primary antibody dilution and/or decreased primary incubation time especially when used with Innovex Signal Enhancing Wash Buffer in place of PBS or tris buffers for the rinse steps.

STAT-Q Kit COMPONENTS (reagents provided in the kit)

- Perox-Block; Stabilized Peroxide Block
- STAT-Q Multivalent anti Mouse, anti Rabbit and anti Rat Secondary Linking antibody.
- STAT-Q Stabilized HRP enzyme (with no loss of activity of peroxidase enzyme with time).
- Stable Turbo action 2-component Liquid DAB.
- Quick DAB Enhancer (optional), recommended for stain amplification when needed.

SYSTEM COMPONENT SPECIFICATIONS

Recommended incubation times for the system are:

- Perox-Block: 15-minutes (stable peroxide block)
- Mouse, Rabbit, Rat primary antibody (**not provided**): Follow suppliers recommended incubation time for the primary antibody employed.
- STAT-Q Secondary Linking Antibody: **10-minutes** (yellow reagent)
- STAT-Q HRP-enzyme: **10-minutes** (red reagent)
- Stable Liquid DAB chromogen: **5-minutes**.
- Quick DAB Enhancer: **2-minutes**

CONTINUED NEXT PAGE

APPLICATION/ INTENDED USE

This product is intended for IHC and ICC staining of mouse, rabbit and rat primary antibodies for human and animal tissues and cell preparations.

INSTRUCTIONS

ALL INNOVEX PRODUCTS ARE DESIGNED TO BE IMPLEMENTED AT ROOM TEMPERATURE (NO HEAT IS REQUIRED).

NO protein or serum blocking required when staining human tissue. A 30-minute blocking with Innovex Background Buster is highly recommended when staining animal tissues. A 5-second rinse step in between incubations steps is sufficient. No extensive washes are required when staining with Innovex staining systems.

1. Following deparaffinization quench endogenous peroxidase activity by applying PEROX-BLOCK (provided in the kit) for 15-minutes; OR achieve the same aim by immersing deparaffinized slides in freshly made 3% hydrogen Peroxide (H₂O₂) prepared in DI water for 10-minutes. *This step is essential for eliminating red blood cell staining.*
2. Rinse with water for **30-seconds**.
3. Incubate the section or smear for **30-minutes to 1-hour** with mouse OR rabbit OR rat primary antibody of choice (not provided); Follow manufacturer' recommended incubation time for the primary antibody employed.
4. Rinse with PBS or INNOVEX HRP-Enhancing Wash Buffer for **5-seconds**.
5. Incubate with Secondary Linking Antibody (yellow reagent) for **10-minutes**.
6. Rinse with PBS or HRP-Enhancing Wash Buffer for **5-seconds**.
7. Incubate with HRP label (red reagent) for **10-minutes**.
8. Rinse with PBS or HRP-Enhancing Wash Buffer for **5-seconds**.
9. Incubate with mixed DAB/substrate solution for **5-minutes** (See *DAB substrate/chromogen mixing protocol below*).
10. Rinse with water.
11. Apply DAB Enhancer and incubate for **2-minutes**; Rinse with tap water. **This step is optional and is especially recommended for weak signals.**
12. Counterstain with hematoxylin (Innovex Product # NB305) OR with hematoxylin of choice.
13. Mount slides with xylene based mounting media OR with aqueous permanent "Advantage Mounting Media" (Innovex Product #NB300).

DAB Substrate/Chromogen Mixing Protocol

- **MIX DAB by adding 1-drop of DAB chromogen** (component 2) to 1-ml **Substrate Buffer** (component 1) in the provided graduated mixing tube or tube of choice and mix. Left over mixed DAB substrate/chromogen solution is stable for 1-week when kept refrigerated. This minimizes the reagent waste and disposal cost of DAB. When darker DAB stain is desired, apply Innovex Quick DAB Enhancer solution (product# NB308) for 2-minutes following the water rinse of DAB step and before counterstaining. DAB Enhancer is included in the kit.

STORAGE CONDITIONS

Store in refrigerator at 2-8°C through expiration date noted on the kit.

Important Notes:

- Innovex **STAT-Q** staining systems and components are **no-wash, no-background** staining Reagents. A one-time rinse step of 5-second in between incubation steps is sufficient.
- Innovex **STAT-Q** staining systems and primary antibodies are **free of background**. Innovex STAT-Q staining systems **do not require normal serum blocking or protein blocking when staining human tissues**.

FOR PROFESSIONAL AND RESEARCH USE

FOR ADDITIONAL TECHNICAL SUPPORT

techsupport@innovexbio.com

CALL: 1-800-622-7808 US and Canada

Phone: (510) 234-6600 Web: innovexbio.com

INNOVEX
b i o s c i e n c e s