

STAT-Q™

STAT-Q, Anti RABBIT Staining System

For IHC staining of Rabbit Primary Antibodies on Human and Animal tissues

10 minutes, 10 minutes, 5 minutes Incubations

☐ **STAT-Q RABBIT, IHC Staining Kit (small volume)**

Product number: NB314KLRD-20 (with DAB); 250-300 slides

INTRODUCTION

Immunohistochemical (IHC) detection systems are used to determine the presence, localization and density of antigens in tissues and cells where antigens are visualized by enzyme immunochemical assay. These detection systems usually consist of a second step reagent of a biotinylated conjugated secondary antibody and a third step reagent of an enzyme such as alkaline phosphatase or horseradish peroxidase (HRP) conjugated to streptavidin. The enzyme is then incubated for a short time with its appropriate substrate and chromogenic substance for color development. The rate of color development measures the enzyme concentration by qualitative (IHC), semi quantitative (image analysis) or quantitative (ELISA) methods.

PRODUCT DESCRIPTION

Innovex STAT-Q Rabbit Rapid Immunostaining System is a no wash, no background IHC staining system that is bio-engineered for short incubation steps and minimal wash steps. This staining system is universally applicable to IHC staining of all rabbit monoclonal and rabbit polyclonal primary antibodies. This system is also universally applicable to staining human tissues and all animal species tissues. This system is further applicable to IHC staining of all tissues and cells regardless of their method of processing, e.g., paraffin sections, cryostat sections, cytocentrifuge preparations and cell smears.

“STAT-Q” Rapid IHC System is designed as a highly sensitive 3-step indirect system for detection of all rabbit antibodies. The system is designed to be virtually free of inherent background as often seen with other staining systems.

“STAT-Q” detection system is also designed to eliminate the need for re-titration of primary antibodies upon the switch over to this system. NO adjustment of currently employed primary antibody dilutions are necessary, simply replace “STAT-Q” in place of the current detection system employed.

SYSTEM COMPONENTS

- Perox Block (Stable Peroxide Block); 35 ml
- STAT-Q Biotinylated anti Rabbit Linking Antibody; 20 ml
- STAT-Q Stabilized Peroxidase-streptavidin label (no loss of enzyme activity with time); 20 ml
- Stable Turbo action two-component liquid DAB; 35 ml
- Quick DAB Enhancer (optional); 7 ml

APPLICATION / INTENDED USE

STAT-Q kit is intended for IHC staining of rabbit primary antibodies in tissue and cell preparations (cytospins, smears).

SYSTEM COMPONENT SPECIFICATIONS

Recommended incubation times for the system are:

- Stable Peroxide Block: **15-minutes**
- Rabbit primary antibody (not provided): **30-minutes to 1-hour.**
- STAT-Q Rabbit Linking Antibody: **10-minutes.**
- STAT-Q Peroxidase (HRP) enzyme: **10-minutes.**
- Liquid DAB chromogen: **5-minutes.**
- Quick DAB Enhancer (OPTIONAL): **3-minutes.**

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INSTRUCTIONS

ALL INNOVEX PRODUCTS ARE DESIGNED TO BE IMPLEMENTED AT ROOM TEMPERATURE.

No serum or protein blocking is required when staining Human tissues with Innovex STAT-Q staining kits.

For Animal tissue IHC staining: Incubate with Innovex Background Buster for 30-minutes, Rinse and then apply primary antibody

For paraffin sections; deparaffinize sections and rehydrate in water.

For Frozen sections, cut sections, dry and fix in cold acetone or the fixative of choice. Incubate frozen PBS for 3-minutes at room temperature. For **Cytocentrifuge preparations**, prepare cytocentrifuge preparations of cell suspensions and observe the following instructions:

1. When using peroxidase enzyme (staining with DAB or AEC), quench tissue endogenous peroxidase activity by incubating tissue with INNOVEX STABLE PEROXIDE BLOCK for 15-minutes OR by immersing slides in freshly made 3% H₂O₂ in DI water for 10-minutes. Rinse with 3 quick changes of water. This step is essential to eliminate red blood cell staining.
2. For Animal Tissues; Apply 2-3 drops of "Background Buster" to achieve specimen coverage and incubate for 20-minutes. For identical-species tissue and antibody such as Rabbit-on-Rabbit, Mouse-On-Mouse, Mouse-on-Rat, Rat-on-Rat; incubate with Background Buster for 30-minutes prior to application of the primary antibody. Background Buster, serum or protein blocking is NOT required when staining human tissues with STAT-Q staining kits.

STEP 2 and 3 are NOT REQUIRED FOR IHC STAINING of HUMAN TISSUES.

3. Rinse with water or IHC buffer such as PBS OR HRP-Enhancing wash buffer (INNOVEX) for 5-seconds and proceed with IHC staining.
4. Incubate the section or smear for **30 minutes to 1-hour** with rabbit primary antibodies (not provided).
5. Rinse with PBS or Innovex HRP-Enhancing Wash Buffer for **5-seconds**.
6. Incubate with anti rabbit secondary linking antibody for **10-minutes**.
7. Rinse with PBS or Innovex HRP-Enhancing Wash Buffer for **5-seconds**.
8. Incubate with Innovex Peroxidase-streptavidin label for **10-minutes**.
9. Rinse with PBS or Innovex HRP-Enhancing Wash Buffer for **5-seconds**.
10. Incubate with mixed DAB/substrate solution for **5-minutes** (See DAB mixing protocol below)
11. Rinse with tap water with 4-quick changes of water.
12. Counterstain with hematoxylin.
13. Mount slides with xylene based mounting media OR Mount directly from water with Innovex permanent "Advantage Mounting Media" (Innovex product #NB300)

DAB Substrate/Chromogen Mixing Protocol

- **Mix DAB by adding 2 drops of DAB chromogen** (component 2) to **2 ml of Ready-To-Use Substrate Buffer** (component 1) in the provided graduated mixing tube or any plastic tube and mix. Left over mixed DAB substrate/chromogen solution is stable for one week when kept refrigerated. Reusing left over DAB solution minimizes reagent waste and disposal costs.

OPTIONAL: When darker DAB stain is desired; Apply Innovex Quick DAB Enhancer solution for 3-minutes. Rinse DAB with water prior to applying DAB Enhancer. **INNOVEX QUICK DAB Enhancer is best applied before counterstaining, this step is optional. Quick DAB enhancer does not cause background.**

STORAGE CONDITIONS

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

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 are 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 RESEARCH USE ONLY

FOR ADDITIONAL TECHNICAL SUPPORT
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