

STAT-Q MONOVALENT anti RABBIT LINKING ANTIBODY

(Stand-alone Component of STAT-Q kit)

Amplified Biotinylated anti Rabbit Secondary Linking Antibody for Rapid IHC & ICC staining of human and animal tissues

Wash-free, Background-free incubation time of 10-minutes

□ Product #: NB314KR-20, 20 ml of anti RABBIT Secondary Linking Antibody
☐ Product #: NB314KR-60, 60 ml of anti RABBIT Secondary Linking Antibody
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#### INTRODUCTION

Immunostaining detection systems are used to determine the presence, localization and density of antigens in binding assays. In immunohistochemistry (IHC) and immunocytochemistry (ICC) staining, antigens are visualized by enzyme immunochemical assays that employ detection systems. Detection or staining systems consist of a second step reagent of a biotinylated secondary antibody and a third step reagent of an enzyme such as alkaline phosphatase (ALP) or horseradish peroxidase (HRP) conjugated to an antibody, avidin or 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 and ICC staining or by semi quantitative image analysis procedure or by quantitative ELISA method.

## PRODUCT DESCRIPTION

STAT-Q" Rabbit Linking antibody for background-free & rapid enzyme Immunostaining System is a component of the STAT-Q detection system. This system is bioengineered for shorter incubation steps for use in IHC and ICC immunostaining procedures. This component of STAT-Q staining system is an amplified monovalent anti-rabbit biotinylated secondary antibody and is applicable to staining all monoclonal and polyclonal rabbit primary antibodies. This component needs to be used with other components of STAT-Q staining kit to achieve staining results. This system is applicable to IHC and ICC staining of human and all animal species tissues and cell preparations. This system is further applicable to staining all tissues and cells regardless of their method of processing, e.g., paraffin sections, cryostat sections, cytocentrifuge preparations or cell smears.

This staining system component is designed to be virtually free of background.

"STAT-Q" detection system is designed to stain all rabbit monoclonal and polyclonal primary antibodies and to eliminate the need for retitration of primary antibodies upon the switch over to this system. When employing STAT-Q immunostaining system, no adjustment of currently employed primary antibody dilutions is necessary, simply replace "STAT-Q" system in place of the current detection system. In addition to shorter incubation steps, STAT-Q detection systems also offer the choice of increased primary antibody dilution and decreased primary incubation time.

## SYSTEM COMPONENT PROVIDED (STAND-ALONE COMPONENT of STAT-Q kit)

• STAT-Q biotinylated anti Rabbit Linking Antibody; Recommended incubation time of 10 minutes.

### **APPLICATION / INTENDED USE**

This product is intended for immunolocalization of rabbit primary antibodies in tissue and cell preparations for immunohistochemical IHC, ICC staining. This component must be used in conjunction with other components of STAT-Q staining kits to achieve staining.

## INSTRUCTIONS

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

No serum or protein blocking and no extensive rinses are required when staining with Innovex staining kits and reagents.

1. Following deparaffinization and retrieval, Quench endogenous peroxidase activity by applying INNOVEX Perox-Block for 15-minutes and rinse with water for 30-seconds. In absence of Perox-Block, achieve the same aim by immersing tissue slides in freshly made 3% hydrogen Peroxide (H₂O₂) prepared in DI water. This step is essential to eliminate red blood cell staining when peroxidase enzyme (HRP) is employed. This step is NOT required when employing alkaline phosphatase enzyme.

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- 2. Rinse Peroxide Block with 3 quick changes of water.
- 3. Incubate the section or smear with rabbit monoclonal or polyclonal primary antibody (not provided), observe manufacturer recommended titer and incubation time.
- 4. Rinse with Innovex Enhancing Wash Buffer" or with PBS for 10 seconds.
- 5. Incubate with STAT-Q anti rabbit secondary Linking antibody for 10-minutes.
- 6. Rinse with Innovex Enhancing Wash Buffer" or with PBS for 10 seconds.
- 7. Incubate with STAT-Q Peroxidase (HRP) Label OR Alkaline Phosphatase label for 10-minutes.
- 8. Rinse with Innovex Enhancing Wash Buffer" or with PBS for 10 seconds.
- 9. Incubate with appropriate substrate/ chromogen for the enzyme employed. For HRP enzyme incubate with mixed AEC or DAB substrate/ chromogen.
  - For alkaline phosphatase enzyme use Fast Red, permanent red or other suitable substrate/ chromogen and follow manufacturer recommended incubation time.
- 10. Rinse with water.
- 11. Counterstain with hematoxylin (Innovex Product #NB305).
- 12. Mount slides with Innovex aqueous based permanent "Advantage" Mounting Media (product #NB300).

## STORAGE CONDITIONS

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

## **Important Notes:**

- Innovex STAT-Q staining kits & kit reagents are minimal wash; A one time 10-second washes in between incubation steps will be sufficient.
- Innovex STAT-Q and POLYMER HISTO-STAT staining kits and its components are free of background and do not require pre-protein blocking or serum blocking prior to the application of primary antibody.
- Innovex Staining Systems and primary antibodies are bioengineered to be free of background, however, when
  background staining is observed due to tissue processing, fixation, primary antibodies or mix and matching of
  reagents from different sources, application of Background Buster (product # NB306) and/or Fc Receptors Blocker
  (product# NB309) is highly recommended. Use of Background Buster and Fc Blocker help with eradication of
  background staining.

ROFESSIONAL AND RESEARCH USE

FOR ADDITIONAL TECHNICAL SUPPORT techsupport@innovexbio.com

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