

Streptavidin-HRP Conjugate	NEL750
Streptavidin-AP Conjugate	NEL751

### **Storage Conditions**

Store at -20°C until first use. Store at 4°C after thawing. **Do not re-freeze this product.**

### **Product Description**

Streptavidin-HRP (NEL750) and Streptavidin-AP (NEL751) are highly sensitive detector conjugates. These conjugates bind to biotin labeled proteins in Western blot, ELISA and immunohistochemistry assays. They also bind to nucleic acids labeled with biotinylated nucleotide analogs in Southern and/or Northern blot, colony/plaque screen and in situ hybridization (ISH) assays.

When used in homologous DNA dot hybridizations with a biotin N<sup>6</sup> labeled DNA probe, as little as 100 femtograms of nucleic acid are detectable on Kodak X-OMAT Blue Autoradiography film with NEN™ Life Science Products *Renaissance*® Nucleic Acid Chemiluminescence Reagent (NEL201, NEL202) in 2 hours or NEN Life Science Products *Renaissance* CDP-*Star*® Nucleic Acid Chemiluminescence Reagent (NEL601) in 5-10 minutes.

These conjugates can also be used for in situ hybridization (ISH) or immunohistochemistry (IHC) assays as part of Tyramide Signal Amplification (TSA), whereby deposition of tyramide-linked detector molecules are catalyzed by horseradish peroxidase for subsequent amplified signal detection. Both the Streptavidin-HRP and Streptavidin-AP conjugates can be used, in conjunction with chromagenic substrates, as reporter molecules for biotin-tyramide deposition. Streptavidin-HRP can also be used as a catalyst for tyramide-linked molecule deposition in assays where nucleic acids (in situ) or proteins (IHC) are labeled with biotin.

### **Suggested Working Concentrations**

The following are suggested conjugate concentration ranges for various assays. Individual conditions may require some conjugate titration to obtain optimal signal clarity.

#### SA-HRP

Membrane assays (e.g., Southern, Northern, Western, colony/plaque): Dilute conjugate 1:12,500-1:25,000 in 1X Phosphate Buffered Saline (PBS), pH 7.1-7.4 (e.g., Dulbecco's PBS), 0.1% SDS, 0.05% Tween-20, blocking reagent (e.g., 0.5% NEN™ Blocking Reagent) or equivalent.

Slide assays (i.e., ISH and IHC) including TSA: Dilute conjugate 1:1250-1:2500 in 0.10 M Tris-HCl, pH 7.5, 0.15 M NaCl, blocking reagent (e.g., 2% sheep serum) or equivalent.

#### SA-AP

Membrane assays (e.g., Southern, Northern, Western, colony/plaque): Dilute conjugate 1:25,000-1:50,000 in 1X Phosphate Buffered Saline (PBS), pH 7.1-7.4 (e.g., Dulbecco's PBS), 0.1% SDS, 0.05% Tween-20, blocking reagent (e.g., 0.5% *Renaissance*® Blocking Reagent) or equivalent.

Slide assays (i.e., ISH and IHC) without amplification: Dilute conjugate 1:1000-1:2000 in 0.10 M Tris-HCl, pH 7.5, 0.15 M NaCl, blocking reagent (e.g., 2% sheep serum) or equivalent.

Slide assays (i.e., ISH and IHC) with TSA: Dilute conjugate 1:2500-1:5000 in 0.10 M Tris-HCl, pH 7.5, 0.15 M NaCl, blocking reagent (e.g., 2% sheep serum) or equivalent.

## **Related Products**

NEL604	Random Primer Biotin Labeling Kit with Streptavidin-AP
NEL804	Random Primer Biotin Labeling Kit with Streptavidin-HRP
NEL624	3' End Labeling Biotin Kit with Streptavidin-AP
NEL824	3' End Labeling Biotin Kit with Streptavidin-HRP
NEL614	Nick Translation Biotin Kit with Streptavidin-AP
NEL814	Nick Translation Biotin Kit with Streptavidin-HRP
NEL634	RNA Biotin Labeling Kit with Streptavidin-AP
NEL834	RNA Biotin Labeling Kit with Streptavidin-HRP
NEL506	Biotin-N <sup>6</sup> -dATP
NEL509	Biotin-N <sup>4</sup> -dCTP
NEL507	Biotin-N <sup>6</sup> -ATP
NEL510	Biotin-N <sup>4</sup> -CTP
NEL508	Biotin-N <sup>6</sup> -ddATP
NEL730(A)	TSA Indirect (ISH)
NEL731(A)	TSA Direct (GreenFISH)
NEL732	TSA Direct (RedFISH)
NEL733	TSA Direct (BlueFISH)
NEL734A	TSA Direct (Cyanine 3 FISH)
NEL700(A)	TSA Indirect (IHC)
NEL701(A)	TSA Direct (Green)
NEL702	TSA Direct (Red)
NEL703	TSA Direct (Blue)
NEL704A	TSA Direct (Cyanine 3)
NEL201	Nucleic Acid Chemiluminescence Reagent: Enhanced luminol-based reagents for HRP detection
NEL100	Western Blot Chemiluminescence Reagent: Enhanced luminol-based reagents for HRP detection
NEL601	Nucleic Acid Chemiluminescence Reagent: CDP- <i>Star</i> (ready to Use). Dioxetane chemiluminescence reagent for AP detection
NEL602	Western Blot Chemiluminescence Reagent: CDP- <i>Star</i> (ready to Use). Dioxetane chemiluminescence reagent for AP detection
NEL300	4CN <i>Plus</i> Chromogenic substrate
NEL310	Biotinylated molecular weight Markers

## **Stability**

Streptavidin-HRP and Streptavidin-AP are stable for at least 6 months from the date of shipment, when stored at 4°C

## **Hazard Warning**

This product is considered to be non-hazardous. Although the product is classified as non-hazardous, we strongly recommend using prudent laboratory practices: Avoiding unnecessary contact, use of gloves, eye protection, lab coats, etc. when using this or any other laboratory reagent.

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