CERTIFICATE OF ANALYSIS

Product **BIOTINYLATED ANTI-STREPTAVIDIN**
AFFINITY PURIFIED

Catalog BA-0500

Amount 0.5 mg

Lot No. ZC0613

Concentration 0.5mg/ml

Produced in goat

Solution 10 mM HEPES, pH 7.5, 0.15 M NaCl, 0.08% sodium azide.
Sucrose has been added for stabilization.

Storage Refrigerate; for long term storage, aliquots may be stored frozen

Biotinylation 99%

Antibody activity after biotinylation (by solid-phase binding assay) 98%

The recommended concentration range for use is 1-10 µg/ml.

Biotinylated Anti-Streptavidin is an unusual molecule. It is capable of binding to Streptavidin by two mechanisms, either through the antigen binding sites in the Fab portion of the antibody or through multiple biotin residues covalently attached to the protein. Although little is known about the mechanism of binding, this reagent appears to provide superior amplification of fluorescent signals compared to biotinylated "extender" molecules or anti-streptavidin alone.

The steps involved in using this product are straightforward. After a biotinylated antibody has been introduced, cells or sections are labeled with fluorochrome-labeled Streptavidin, followed by Biotinlyated Anti-Streptavidin, and then a second labeling with the fluorochrome-labled Streptavidin. This procedure results in the introduction of several more fluorochromes at the antigenic site in the tissue. Cell sorter analysis has shown that a several-fold increase in fluorescence can be achieved in some antibody labeling studies using Biotinylated Anti-Streptavidin. Other applications of this unique reagent are currently under investigation.

Simmons PJ, Przepiorka D, Thomas ED, and Torok-Storb B: Host Origin of Marrow Stromal Cells Following Allogeneic Bone Marrow Transplantation. Nature. Vol. 328, 429-432, 1987.

Przepiorka D and Myerson D: A Single-step Silver Enhancement Method Permitting Rapid Diagnosis of Cytomegalovirus Infection in Formalin-fixed, Paraffin-embedded Tissue Sections by In Situ Hybridization and Immunoperoxidase Detection. J. Histochem. Cytochem. Vol. 34, 1731-I734, 1986.

Pinkel D, Straume T and Gray JW: Cytogenetic Analysis Using Quantitative, High-sensitivity Fluorescence