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## CERTIFICATE OF ANALYSIS

Product **BIOTINYLATED ANTI-AVIDIN D**  
**\*AFFINITY PURIFIED\***

Catalog BA-0300

Amount 0.5 mg active conjugate

Lot No. U1223

Produced in goat

Solution Reconstitute by adding 1 ml water. The resulting solution will have the following composition: 10 mM HEPES, pH 7.5, 0.15 M NaCl, 0.08% sodium azide. Immunohistochemical grade bovine serum albumin has been added for stabilization.

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

Biotinylation 98%

Antibody activity after biotinylation (by solid-phase binding assay) 99%

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

Biotinylated Anti-Avidin D is an unusual molecule. It is capable of binding to Avidin D 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-avidin alone.

The steps involved in using this product are straightforward. After a biotinylated antibody has been introduced, cells or sections are labeled with Fluorescein Avidin DCS, followed by Biotinylated Anti-Avidin D, and then a second labeling with Fluorescein Avidin DCS. 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-Avidin D. Other applications of this unique reagent are currently under investigation.

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Przepiorcka 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, 1731-1734, 1986.

Pinkel D, Straume T and Gray JW: Cytogenetic Analysis Using Quantitative, High-sensitivity Fluorescence Hybridization. *Proc. Natl. Acad. Sci.* Vol. 83, 2934-2938, 1986.

Phillips HS, Nikolics K, Branton D and Seeburg PH: Immunocytochemical Localization in Rat Brain of a Prolactin Release-Inhibiting Sequence of Gonadotropin-Releasing Hormone Prohormone. *Nature*. Vol. 316, 542-545, 1985