

Technical Bulletin

ExtrAvidin®-Peroxidase

Buffered aqueous solution

E2886

Product Description

ExtrAvidin® is prepared from egg white avidin. It is a tetrameric protein containing four high affinity binding sites for biotin. ExtrAvidin® is a modified form of affinity purified avidin. ExtrAvidin® combines the high specific activity of avidin with the low background staining of streptavidin, a biotin binding protein produced by the bacteria *Streptomyces avidinii*. ExtrAvidin® binds biotin with the high affinity of egg white avidin, however, it does not exhibit the unwanted non-specific binding reported for egg white avidin at physiological pH, such as the staining of mast cells.

Uses

ExtrAvidin®-Peroxidase may be used in conjunction with biotin in techniques such as ELISA, immunohistochemistry, protein blotting or with biotinylated-DNA probes. It provides a convenient yet highly sensitive and very specific detection system.

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, with 0.05% MIT as a preservative.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage

Store at 2-8 °C. **Do Not Freeze.**

If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Produce Profile

Immunohistology

A dilution of 1:100 of the conjugate was determined.

Dot blot

A minimum dilution of 1:4,000 of the conjugate was determined.

ELISA

A minimum dilution of 1:2,000 of the conjugate was determined.

Note: In order to obtain best results, it is recommended that each individual user determine their optimum working dilution by titration assay.

Specificity

The product is found to be reactive with Anti-Avidin, Cat. No. A5170, and non-reactive with Anti-Streptavidin, Cat. No. S6390, by immunoelectrophoresis.

Molar Ratio (ExtrAvidin®:Peroxidase)

0.5-0.9

Protein Concentration:

2.0-2.5 mg/mL by $E_{280}^{1\%}$ = 12.4

Enzyme Activity

Enzyme activity is determined using 5% pyrogallol, Cat. No. P0381, in deionized water, pH 6.0, at 20 °C. One purpurogallin unit will form 1 mg of purpurogallin from pyrogallol in 20 seconds at pH 6.0, 20 °C.

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