

## STREPTAVIDIN COATED PCR 8 STRIP TUBES

Streptavidin coated surfaces offer a powerful and universal instrument for binding any biotinylated molecule (Proteins-Peptides-Polysaccharides-Oligonucleotides-DNA fragments-etc.)

Streptavidin is a tetrameric protein (M.W. 60 kDa) with very high affinity for biotin ( $Ka=10^{-15}\,M$ ); the bond is the strongest known non-covalent biological interaction.

Biotin is a small molecule which can be conjugated to many proteins without losing or altering their activity, each protein can bind many biotin molecules.

Since each subunit of streptavidin binds one molecule of biotin, the resulting effect is a great increase of the sensitivity of the assav.

The streptavidin-biotin bonding main features

- stability
- specificity
- affinity

make it useful for special applications of molecules which do not offer reliable bonding by passive adsorption or adsorb in a unfavorable orientation.

### **Product specifications**

#### Coating

Streptavidin is coated using 100  $\mu$ l/tube. The PCR 8 strip tubes are post-coated (blocked) for low non specific binding and long-term stability.

#### **Binding capacity towards biotin**

Streptavidin coated PCR 8 strip tubes were incubated with biotin solutions containing biotinylated peroxidase for 30' R.T. After washing step, the PCR 8 strip tubes were incubated with TMB and blocked with sulphuric acid 1N. The O.D. values were read at 450 nm

The Biomat Streptavidin coated PCR 8 strip tubes shows a nominal binding capacity of ~ 5-6 pMol d-biotin/tube.

#### Uniformity

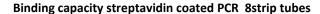
The Streptavidin PCR 8 strip tubes show a CV% less than 5when used as a catcher of biotin-HRP as detector in an ELISA format using TMB as substrate.

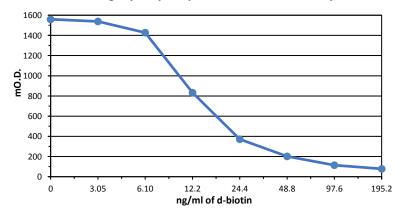
# **Storage and Stability**

The Streptavidin PCR 8 strip tubes, if unopened, are stable at 2-8°C until the expiration date printed on the label. If opened, store in closed pouch with desiccant and use within the expiration date.

# Binding capacity streptavidin coated PCR strip tubes

Streptavidin coated PCR 8 strip tubes were incubated with biotin solutions (from 0 to 195.2 ng/ml) containing 1.3 ng/ml of biotinylated peroxidase for 30' R.T. After washing step, the streptavidin PCR 8 strip tubes were incubated with TMB and blocked with sulphuric acid 1N. The O.D. values were read at 450 nm.





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