



## PRODUCT INFORMATION

### **Streptavidin FITC Conjugate - 1.0 mg**

PRODUCT CODE: X-CON-0001-1.0MG

STORAGE: 2 - 8 °C, protected from light

### **PRODUCT DESCRIPTION**

Streptavidin binds to biotin with high affinity. The streptavidin-biotin bond is one of the strongest non-covalent interaction in nature, making it extraordinarily robust. Fluorescein isothiocyanate (FITC) is the derivative of fluorescein with an isothiocyanate reactive group, rendering it reactive towards amine and sulfhydryl groups commonly found in biomolecules. In water, its maximum absorption/emission is 494/518 nm, corresponding to the colour blue and green. The blue colour spectrum is 450-495 nm, and the green spectrum is 495-570 nm. Streptavidin is conjugated with FITC under optimal conditions. The solution is free from unbound FITC. Streptavidin FITC Conjugate is useful as a secondary reagent for detecting biotinylated molecules in immunohistochemistry procedures.

### **PRECAUTIONS AND DISCLAIMER**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### **FORMULATION**

For shipping at ambient temperature Streptavidin FITC Conjugate is dried with a HEPES, NaCl, sucrose buffer base.

### **PREPARTION AND HANDLING**

The product should be reconstituted with 100 µl water yielding a concentration of 10 mg/ml.

The reconstituted stock solution can be frozen in aliquots for later usage. Stock solutions can be diluted in buffers containing FCS or BSA as needed. Protect from prolonged exposure to light.

### **STORAGE / STABILITY**

For long term storage the dry-stabilized Streptavidin FITC Conjugate should be stored between 2 °C and 8 °C. Reconstituted stock solutions can be stored at 2 - 8 °C for up to 2 weeks. For long term storage, stock solutions can be frozen in working aliquots. Repeated freeze-thaw cycles should be avoided.

### **RECONSTITUTION AND CONCENTRATION**

10 mg/ml after reconstitution with 100 µl H<sub>2</sub>O (concentration relates to the Streptavidin only component of the conjugate).

### **RECOMMENDED DILUTION**

For immunofluorescent staining a final concentration of 5 to 10 µg/ml is recommended. For optimal performance the reagent should be titrated for each application.

### **RECOMMENDED RETEST DATE**

07/2021

### **BACKGROUND REFERENCES**

1. Wong, J., et al., Direct force measurements of the streptavidin –biotin interaction, *Biomolecular Engineering*, 16, 45-55 (1999).