

Product Data Sheet

Date of Issue: 22 Feb 2019

1. Product Information

- Product Name : Streptavidin, ICG
- Catalog Number : RFP0715
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at 4 °C

2. Additional Information

- Fluorophore Label : ICG
- Reactive Group : Streptavidin
- Reactive Toward : Biotin
- Excitation _{Max} : 785 ± 3 nm
- Emission _{Max} : 812 ± 4 nm

3. Description

Streptavidin-ICG is a fluorescence labeled biotin binding protein that indocyanine green (ICG) dye is covalently attached to streptavidin. ICG is clinically approved NIR dye, and maxima of Ex/Em values are at 785/812 nm. Homotetrameric protein streptavidin displays high binding affinity ($K_d \sim 10^{14}$ M) for biotin, and each streptavidin can bind with four biotins by a non-covalent interaction. Streptavidin displays a little lower affinity but less non-specific binding than avidin. Fluorescence conjugated streptavidin/biotin pair has been utilized in a wide range of applications such as cell surface labeling, ELISA, immunohistochemistry, affinity purification, FACS, EMSA, etc. The bond formation between biotin and streptavidin is rapid, and once formed, is stable at high temperature and in a wide range of pH, organic solvents and denaturing agents. BioActs offers Streptavidin-ICG as effective detecting and analytic probe for diverse applications in medical diagnostics, in vitro, vivo and animal model study.