

# Product Data Sheet

**Date of Issue: 26 Nov 2019**

## 1. Product Information

- Product Name : Streptavidin, Flamma® 749
- Catalog Number : RFP0713
- Packing Unit : 1 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at -20 °C

## 2. Description

Streptavidin, Flamma® 749 is a fluorescence labeled biotin binding protein that Flamma® 749 dye is covalently attached to streptavidin. Homotetrameric protein streptavidin (53 KDa) 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 has a little lower affinity than avidin but displays less non-specific binding due to near-neutral pI value and lack of carbohydrates. Flamma® 749 is a near infrared (NIR) fluorescent dye. Flamma® 749 might be excited using 750 nm laser line or dye-pumped laser excitation. Fluorescent streptavidin–biotin conjugation 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 the binding is stable at high temperature, in a wide range of pH and denaturing agents. BioActs offers Streptavidin, Flamma® 749 as an effective detecting and analytic probe for diverse applications in medical diagnostics, in vitro, in vivo and animal model study.