

# Product Data Sheet

**Date of Issue: 26 Nov 2019**

## 1. Product Information

- Product Name : Streptavidin, Flamma® 675
- Catalog Number : RFP0712
- Packing Unit : 1 mg
- Appearance : Blue Solid
- Storage Conditions : Protect from Light at -20 °C

## 2. Description

Streptavidin, Flamma® 675 is a fluorescence labeled biotin binding protein that Flamma® 675 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® 675 is a near infrared (NIR) fluorescent dye. Flamma® 675 might be excited using 633 nm laser line. 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® 675 as an effective detecting and analytic probe for diverse applications in medical diagnostics, in vitro, in vivo and animal model study.