

# Product Data Sheet

**Date of Issue: 26 Nov 2019**

## 1. Product Information

- Product Name : Biotin, Flamma® 749
- Catalog Number : RFP0613
- Packing Unit : 1 mg / 5 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at 4 °C

## 2. Additional Information

- Fluorophore Label : Flamma® 749
- Reactive Group : Biotin
- Molecular Weight : 951 g/mol
- Excitation<sub>Max</sub> : 749 ± 3 nm
- Emission<sub>Max</sub> : 774 ± 4 nm
- Extinction Coefficient : ≥ 200,000 /cm·M

## 3. Description

Biotin, Flamma® 749 is a fluorescent biotin that Flamma® 749 dye is covalently attached to biotin. Biotin, a 244 dalton vitamin found in all living cells, binds to avidin and streptavidin in high affinity. In biotechnology, biotin conjugated antibodies, enzymes, small molecules or reporters are used to form complex with avidin/streptavidin. Flamma® 749 is a near infrared (NIR) fluorescent dye. Flamma® 749 might be excited using 750 nm laser line or dye-pumped laser excitation. Fluorescence-conjugated biotins have been utilized in various applications such as cell surface labeling, ELISA, immunohistochemistry, affinity purification, FACS, EMSA, etc. The bond formation between biotin and avidin/streptavidin is rapid, and the binding is stable at high temperature, in a wide range of pH and denaturing agents. BioActs offers Biotin, Flamma® 749 as an effective detecting and analytic probe for diverse applications in medical diagnostics, in vitro, in vivo and animal model study.