

Product Data Sheet

Date of Issue: 26 Feb 2024

1. Product Information

- Product Name : FisoTherm™ C Blue
- Catalog Number : TFML0001
- Packing Unit : 200ul, 1000ul
- Appearance : Blue Solid
- Storage Conditions : Store at -20 °C in a dark

2. Additional Information

- Molecular Weight : 469.40

3. Description

FisoTherm™ C Blue Dye is fluorescent and colorimetric dyes to measure DNA amplification as it occurs during Loop-Mediated Isothermal Amplification (LAMP) or real-time PCR. The fluorescent variants of this dye displays weak background fluorescence that increases dramatically upon reacting to dsDNA. Real-time PCR and LAMP are used in diverse applications such as gene analysis, detection and genotyping of microbial agents, clinical diagnosis, food safety, cancer phenotyping, etc. In real-time PCR, amplification of the target sequence results in an increase of fluorescence that is directly proportional to the amount of dsDNA present at each PCR cycle. Thus, newly synthesized dsDNA sequence might be quantified with a fluorescent reporter during the PCR amplification. LAMP utilizes 4-6 primers recognizing 6-8 distinct regions of target DNA for a highly specific yet sensitive amplification, and it runs in isothermal condition resulting in shorter reaction time. FisoTherm™ C Blue is a colorimetric dye that specifically designed to monitor LAMP reaction. The dye changes its color from red to purple upon reacting to pyrophosphate that liberated during amplification. BioActs offers FisoTherm as fluorescent and colorimetric probes for monitoring of real-time PCR and LAMP in various fields such as clinical, environment, biological, etc.