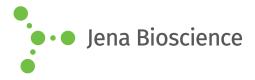
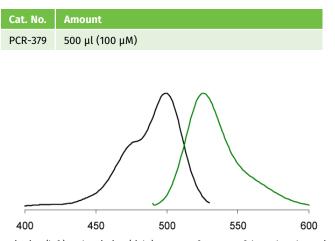
# **DATA SHEET**





# EvaGreen<sup>®</sup> Fluorescent DNA Stain

DNA Intercalating dye for real-time qPCR fluorescence analysis including HRM



Excitation (left) and emission (right) spectra of EvaGreen® bound to dsDNA in PBS buffer (pH 7.3).

For in vitro use only!

## Shipping: shipped on blue ice

Storage Conditions: store at -20 °C

Additional Storage Conditions: store dark

## Shelf Life: 12 months

Form: orange liquid (Supplied in 20 mM Tris-HCl pH 8.5, 0.1 mM EDTA and 0.01 % Tween-20)

#### Concentration: 100 µM

Spectroscopic Properties:  $\lambda_{exc}$  500 nm (bound to DNA),  $\lambda_{em}$  530 nm (bound to DNA)

#### **Description:**

EvaGreen® Fluorescent DNA Stain is a superior DNA intercalator dye specially developed for DNA analysis applications including real-time PCR (qPCR) and high-resolution DNA melting curve analysis (HRM). Upon binding to DNA, the non-fluorescent dye becomes highly fluorescent while showing no detectable inhibition to the PCR process. The dye is extremely stable both thermally and hydrolytically, providing convenience during routine handling. To perform the EvaGreen-based assay select the optical setting for SYBR® Green or FAM on the detection instrument.

High Resolution Melting (HRM) analysis is a powerful tool for detection of mutations, polymorphisms and epigenetic differences in DNA samples. It is a fast and cost effective alternative to other genotyping technologies.

EvaGreen<sup>®</sup> fluorescent DNA stain is supplied as 100  $\mu$ M concentration. Vortex EvaGreen<sup>®</sup> Fluorescent DNA Stain thoroughly prior to its use. An EvaGreen concentration of 0.5 - 1.5  $\mu$ M in the final assay is recommended. Add EvaGreen<sup>®</sup> Fluorescent DNA Stain as indicated in the table below per assay. Please note that the preparation of a master mix may be crucial in quantitative PCR reactions to reduce pipetting errors.

Select the optical setting for EvaGreen®, SYBR® Green or FAM on the detection instrument.

final EvaGreen® concentration	20 µl PCR assay	50 μl PCR assay
0.5 μΜ	0.1 µl	0.25 µl
1.0 μM	0.2 µl	0.50 μl
1.5 μM	0.3 µl	0.75 µl

 $\ensuremath{\mathsf{EvaGreen}}\xspace^{\$}$  is a registered trademark and licensed for sale by Biotium, Inc., Hayward, CA, USA

SYBR® is a registered trademark of Invitrogen Corporation, Carlsbad, California, USA.

