

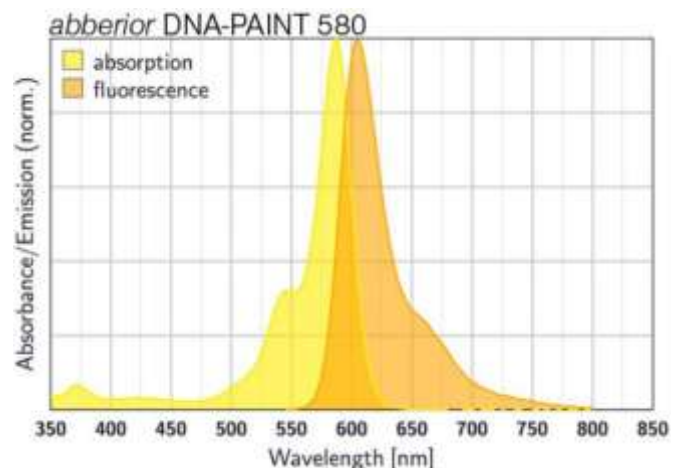
abberior DNA-PAINT 580 FLASH anti-mouse IgG1 MINFLUX,1 Kit

Item number

PAINT580-0066-1KIT

Description

abberior DNA-PAINT 580 is designed for DNA-PAINT MINFLUX microscopy in the orange spectral range, offering superior imaging performance. With outstanding photostability and a fluorescent quantum yield of 90%, it ensures bright and reliable results. Easily excited between 550-600 nm, this dye is an excellent substitute for Cy3, Cy3B, ATTO® 590, or Alexa Fluor® 568. For optimal performance, we recommend using freshly prepared samples. Perfect for achieving high-resolution nanoscale imaging!



abberior DNA-PAINT 580, FLASH gives you the chance to adapt, customize and extend your kit according to your experimental requirements. For best results, we recommend using freshly prepared samples.

This kit contains a camelid single-domain antibody (sdAb) for DNA-PAINT, targeting mouse IgG1. The sdAb is attached to a DNA-PAINT docking site, and two sdAbs bind to one primary antibody, creating two docking sites per primary antibody. The compact size of the camelid sdAbs minimizes linkage error and enhances the accessibility of primary antibody-labeled proteins. The included imager strands are conjugated to abberior DNA-PAINT 580, ensuring exceptional performance in the red spectral range. Optimized for MINFLUX imaging, the kit has all the necessary buffers for immunostaining and DNA-PAINT imaging, delivering unmatched accuracy in nanoscale measurements.

Properties

Absorption	λ_{ex} [nm]	587
Extinction Coefficient	ϵ_{max} [M ⁻¹ cm ⁻¹]	85000
Emission	λ_{em} [nm]	607
Quantum Efficiency	η_{fl} [%]	90
Fluorescence Lifetime	τ_{fl} [ns]	3.5
Correction Factor 260	CF ₂₆₀	0.17
Correction Factor 280	CF ₂₈₀	0.17
Molecular Weight	MW [g/mol]	2942
Charge	Δq	1
Derivative/Conjugate	DNA-PAINT Kit	

Photophysical properties were measured for carboxylic acid in PBS pH 7.4.

Storage

Upon arrival, the product can be stored as described below. Protect the conjugate from direct light exposure and avoid repeated freeze-thaw cycles.

- Store FLASH sdAB + Docking Site at -20°C.
- Store FLASH imager with dye at -20°C.
- Store FLASH adapter with dye at -20°C.
- Store abberior Antibody incubation buffer at 4°C.
- Store abberior Washing buffer and abberior Imaging buffer at room temperature.