

Chromeo™ 488 Goat anti-Mouse IgG

Catalog No: 15031, 15051

Format: 1 mg, 100 µg

Chemical Properties:

Contents: 1 mg (Catalog No. 15031) or 0.1 mg (Catalog No. 15051) of Chromeo™ 488 conjugated Goat anti-Mouse IgG (H+L) and 1 ml MAXfluor™ Mounting Medium.

The antibody concentration is 2 mg/ml in 0.01 M potassium phosphate, 0.15 M sodium chloride pH 7.4, containing 2 mM sodium azide.

Specificity: This antibody was purified by immunoaffinity chromatography. It reacts with whole molecular mouse IgG and the light chains of other mouse immunoglobulins. No cross-reactivity with non-immunoglobulin serum proteins was observed.

Fluorescent Properties: Chromeo 488 is spectrally similar to FITC and Alexa® 488. The conjugated antibodies exhibit superior luminescent properties and stability towards photobleaching when combined with MAXfluor Mounting Medium. Chromeo 488 conjugated antibodies have absorption and emission maxima of approximately 490 and 527 nm, which are compatible with common excitation sources and filter sets.

Molar extinction Coefficient: 73,000 M⁻¹cm⁻¹ (measured at A_{max})

Quantum Yield: ~48%

Excitation Wavelength Range: 470 to 500 nm

Emission Wavelength Range: 515 to 530 nm

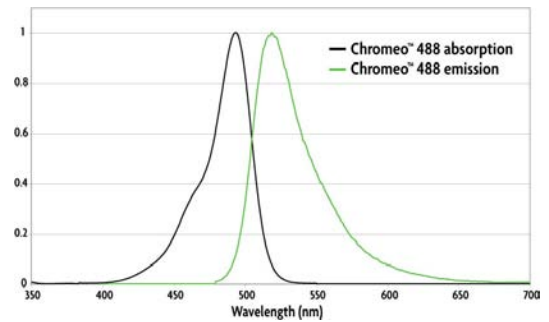
Applications:

Immunofluorescence: 1:1000 to 1:2000 dilution

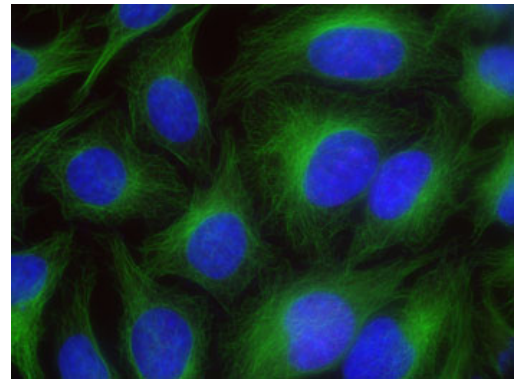
Plate-based assays: 1:800 to 1:1000 dilution

Quality Control: This antibody has been quality control-tested by spectrophotometrical evaluation, by immunohistochemistry (IHC) and by plate-based assays.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Upon receipt, unconjugated antibodies may be stored at -20°C for up to 2 years. Fluorophore- & enzyme-conjugated antibodies, and the MAXfluor Mounting Medium, should be stored at 4°C. Fluorophore-conjugated antibodies should be protected from light. Keep reagents on ice when not in storage; to avoid repeated freeze/thaw cycles, we recommend aliquoting items that will be stored frozen into single-use fractions prior to freezing. This product is guaranteed for 6 months from date of receipt



Absorption and emission spectra of Chromeo 488 Dye.



HeLa cells stained with alpha Tubulin mAb and Chromeo 488 Goat anti-mouse IgG.

HeLa cells were stained with alpha Tubulin mouse mAb (Clone 5-B-1-2; Cat. No. 39527) and Chromeo 488 Goat anti-mouse IgG. The nuclei have been counterstained with DAPI.

Protocol: Chromeo™ 488 conjugates in fluorescent microscopy

To ensure a maximum in photostability of Chromeo 488 conjugates under all experimental conditions, we recommend MAXfluor Mounting medium in fluorescence microscopy experiments.

MAXfluor Mounting Medium is a non-hardening, glycerol-based, aqueous mounting medium that provides optimal fluorescent stability and inhibits photobleaching during examination by traditional and super-resolution microscopy. The effectiveness of MAXfluor Mounting Medium may depend on which fluorescent dye it is used with. It has been optimized for, and shown to increase the fluorescence stability of Fluorescein and Chromeo 488. It is not recommended for use with Chromeo 494 and Alexa 488.

Maxfluor Mounting Medium has not been certified for STED microscopy by Leica Microsystems. For high resolution STED microscopy, Leica recommends the mounting medium included in the Chromeo STED Immunofluorescence System (Catalog No. 15260)

MAXfluor Mounting Medium is designed to be dispersed over an entire coverslip. Recommended usage is 15-20 µl per 22 mm square coverslip. The coverslips may be sealed with nail polish or other sealants for long-term storage.