iFluor™ 488 Conjugated Goat anti-Rat IgG(H+L) Antibody

HA1133

Product Type: Goat polyclonal IgG, secondary antibodies

Species reactivity: Rat

Applications: IF-Cell, IF-Tissue, FC

Description: Whole IgG antibodies are isolated as intact molecules from antisera by immunoaffinity chromatography. They have an Fc portion and two antigen binding Fab portions joined together by disulfide bonds and therefore they are divalent. The average molecular weight is reported to be about 160 kDa. The whole IgG form of antibodies is suitable for the majority of immunodetection procedures and is the most cost effective. Although FITC is still the most popular fluorescent labeling dye for preparing green fluorescent bioconjugates, there are certain limitations with FITC, such as severe photobleaching for microscope imaging and pH-sensitive fluorescence. Protein conjugates prepared with iFluor™ 488 dyes are far superior compared to conjugates of fluorescein derivatives such as FITC. iFluor™ 488 conjugates are significantly brighter than fluorescein conjugates and are much more photostable. Additionally, the fluorescence of iFluor™ 488 is not affected by pH (4-10). This pH insensitivity is a major improvement over fluorescein, which emits its maximum fluorescence only at pH above 9. iFluor™ 488 SE dye is reasonably stable and shows good reactivity and selectivity with protein amino groups.

Conjugate: iFluor™ 488, Ex: 491nm; Em: 516nm.

Immunogen: Rat IgG(H+L).

Recommended Dilutions:

IF-Cell	1:500
IF-Tissue	1:500
FC	1:500

Storage Buffer: Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

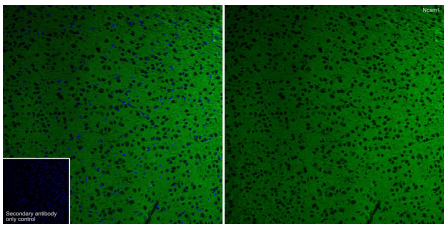

Fig1: Immunofluorescence analysis of paraffin-embedded mouse brain tissue labeling NCAM1 with Rat anti-NCAM1 antibody at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (NCAM1, green) at 1/50 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rat IgG H&L (iFluor™ 488, HA1133) was used as the secondary antibody at 1/500 dilution. Nuclei were counterstained with DAPI (blue).