Goat anti-Mouse IgG2a Cross-Adsorbed Secondary Antibody, Alexa Fluor 647

Product Details	
Size	500 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Goat / IgG
Class	Polyclonal
Type	Secondary Antibody
Conjugate	Alexa Fluor® 647
Immunogen	Mouse IgG2a
Form	liquid
Concentration	2 mg/mL
Purification	purified
Storage buffer	PBS, pH 7.5
Contains	5mM sodium azide
Storage conditions	4° C, store in dark
RRID	AB_2535810

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	1-10 µg/mL	4 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	1-10 µg/mL	4 Publications
Flow Cytometry (Flow)	-	1 Publication
Miscellaneous PubMed (Misc)	-	15 Publications

Product Specific Information

To minimize cross-reactivity, these goat anti-mouse IgG2a whole secondary antibodies have been affinity purified and cross-adsorbed against mouse IgM, mouse IgA, pooled human sera, purified human paraproteins, and mouse isotypes IgG1, IgG2b, and IgG3 prior to conjugation. Cross-adsorption or pre-adsorption is a purification step to increase specificity of the antibody resulting in higher sensitivity and less background staining. The secondary antibody solution is passed through a column matrix containing immobilized serum proteins from potentially cross-reactive species. Only the nonspecific-binding secondary antibodies are captured in the column, and the highly specific secondaries flow through. The benefits of this extra step are apparent in multiplexing/multicolor-staining experiments (e.g., flow cytometry) where there is potential cross-reactivity with other primary antibodies or in tissue/cell fluorescent staining experiments where there are may be the presence of endogenous immunoglobulins.

Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor 647 dye is a near-infrared-fluorescent dye with excitation ideally suited to the 647 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 647 dye is pH-insensitive over a wide molar range. Probes with high fluorescence quantum yield and high

photostability allow detection of low-abundance biological structures with great sensitivity. Alexa Fluor 647 dye molecules can be attached to proteins at high molar ratios without significant self-quenching, enabling brighter conjugates and more sensitive detection. The degree of labeling for each conjugate is typically 2-8 fluorophore molecules per IgG molecule; the exact degree of labeling is indicated on the certificate of analysis for each product lot.

Using conjugate solutions: Centrifuge the protein conjugate solution briefly in a microcentrifuge before use; add only the supernatant to the experiment. This step will help eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining. Because staining protocols vary with application, the appropriate dilution of antibody should be determined empirically. For the fluorophore-labeled antibodies a final concentration of 1-10 µg/mL should be satisfactory for most immunohistochemistry and flow cytometry applications.

Product will be shipped at Room Temperature.

26 References

Western Blot (1)

Scientific reports

MKRN2 is a novel ubiquitin E3 ligase for the p65 subunit of NF-B and negatively regulates inflammatory responses.

"A21241 was used in western blot to find that MKRN2 is a novel p65 ubiquitin E3 ligase"

Authors: Shin C,Ito Y,Ichikawa S,Tokunaga M,Sakata-Sogawa K,Tanaka T

Species
Not Applicable

Dilution
Not Cited

Year
2017

Immunohistochemistry (4)

Journal of immunology (Baltimore, Md. : 1950)

Widespread Virus Replication in Alveoli Drives Acute Respiratory Distress Syndrome in Aerosolized H5N1 Influenza Infection of Macaques.

"A21241 was used in immunohistochemistry to ask if small particle aerosols of virus would penetrate the lower respiratory tract and blanket alveoli where target cells reside"

Authors: Wonderlich ER,Swan ZD,Bissel SJ,Hartman AL,Carney JP,O'Malley KJ,Obadan AO,Santos J,Walker R, Sturgeon TJ,Frye LJ,Maiello P,Scanga CA,Bowling JD,Bouwer AL,Duangkhae PA,Wiley CA,Flynn JL,Wang J,Cole KS, Perez DR,Reed DS,Barratt-Boyes SM

Species
Not Applicable

Dilution
Not Cited

Year
2017

Life science alliance

Pericytes promote skin regeneration by inducing epidermal cell polarity and planar cell divisions.

"A-21241 was used in Immunohistochemistry-immunofluorescence to provide evidence that the secreted protein expressed by pericytes in human skin BMP-2 grant cell polarity and planar divisions on epidermal cells in organotypic cultures."

Authors: Zhuang L,Lawlor KT,Schlueter H,Pieterse Z,Yu Y,Kaur P

Species
Mouse
Not Applicable

Dilution
1:200
1:200

Year
2018

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Immunohistochemistry (Frozen) (1)

Wound repair and regeneration : official publication of the Wound Healing Society [and] the European Tissue Repair Society

Healthy human second-trimester fetal skin is deficient in leukocytes and associated homing chemokines.

"A21241 was used in immunohistochemistry - frozen section to examine immune cells and chemokines present in human second-trimester fetal skin"

Authors: Walraven M,Talhout W,Beelen RH,van Egmond M,Ulrich MM

Species
Not Applicable

Dilution
1:500

Year
2016

More applications with references on thermofisher.com

ICC/IF (4) **Flow (1)** **Misc (15)**