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Datasheet for 610-100-121

Mouse IgG (H&L) Antibody Rhodamine Conjugated Pre-Adsorbed

Overview

Description:	Goat Anti-Mouse IgG (H&L) Antibody Rhodamine Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Rb Rt & Sh Serum Proteins) - 610-100-121
Item No.:	610-100-121
Size:	1 mg
Applications:	Dot Blot, FISH, IF, Multiplex
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-Mouse IgG Rhodamine Antibody generated in goat detects reactivity to Mouse IgG. Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the compliment cascade, and opsonization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both the Heavy and Light chains of the antibody molecule are present. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition.
Synonyms:	goat anti-Mouse IgG rhodamine conjugated Antibody, goat anti-Mouse IgG Antibody TRITC conjugation
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	Rhodamine (TRITC)
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	1

Target Details

Reactivity:	Mouse
Immunogen:	Mouse IgG whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Mouse IgG and Mouse Serum. No reaction was observed against Bovine, Chicken, Goat, Guinea Pig, Hamster, Horse, Human, Rabbit, Rat and Sheep Serum Proteins.

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	FISH, IF, Multiplex (Based on references)
Application Note:	Anti-Mouse IgG Rhodamine Antibody has been tested by dot blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	1:500 - 1:2,500
FLISA:	1:10,000 - 1:50,000
IF:	1:1,000 - 1:5,000

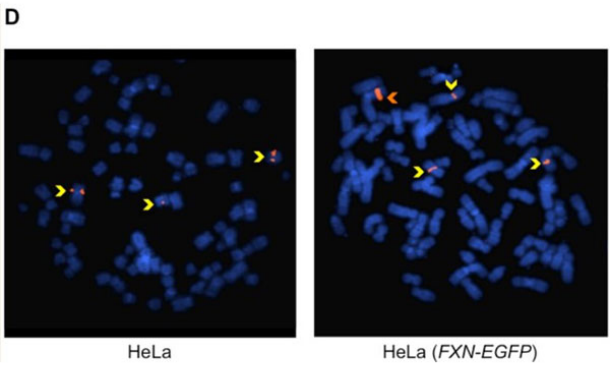
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

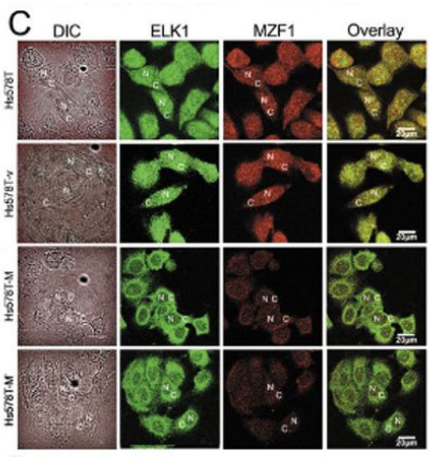
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

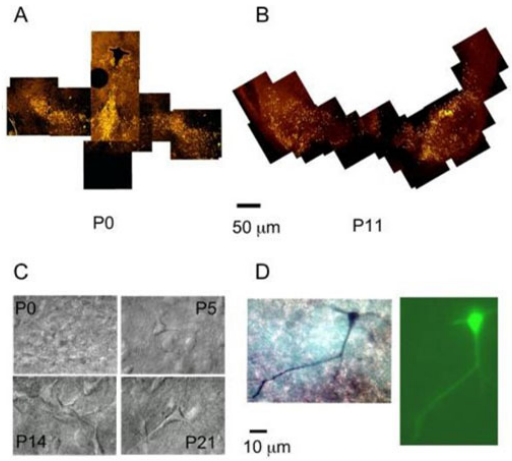
Images



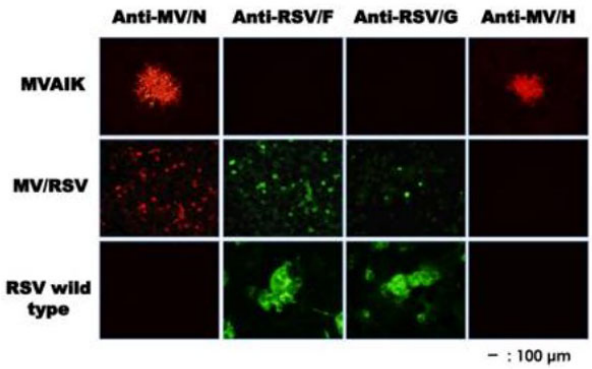
Fluorescence in situ Hybridization (FISH)
Characterization of HeLa (FXN-EGFP) stable cell lines. The probe was prepared using purified DNA from RP11-265B8, which was labeled by nick translation with digoxigenin. The labeled DNA was ethanol precipitated together with human COT1 DNA and resuspended in 50% formamide, 10% dextran sulfate, and 2×SSC to a concentration of 40 ng/µl. The probe was denatured by heating at 75°C, followed by preannealing at 37°C and Hybridization was at 37°C. The probe was detected with mouse anti-digoxigenin antibody followed by rhodamine conjugated anti-mouse antibody.
(D) Determination of transgenic fragment integration site by FISH. Rhodamine-labeled RP11-265B8 was hybridized onto metaphase chromosomes (DAPI stained) of HeLa (left) and HeLa (FXN-EGFP) (right) cells. Three hybridization signals (yellow arrows) corresponded to the endogenous FXN gene. The presence of one additional brighter signal (orange arrow) establishes the presence of a single integration site containing multiple copies of the FXN-EGFP transgene.
Figure 1. PMID: 23418481.



Immunofluorescence Microscopy
Disrupting the interaction between MZF1 and ELK1 by MZF160-72 interrupts EMT in Hs578T cells. (C) Immunofluorescence staining showed the distribution of the ELK1 and MZF1 proteins. The cells were fixed and stained with antibodies against ELK1 and MZF1 [1:400] followed by the appropriate FITC-or rhodamine-conjugated secondary antibodies. Confocal slices of 0.5 and 0.6 µm were obtained, and images were taken through the center of the nucleus. "N" indicates the nucleus, and "C" indicates the cytosol. Figure 2. PMID: 31366500.



Immunofluorescence Microscopy
Distribution, morphology, and double staining of SN DA neurons.
(A) TH staining of rat midbrain neurons in transversal sections of 200µm thickness. Sections were cut, fixed, and labeled with a fluorescent anti-TH antibody as described in the methods. TH-antibody staining of a P0 rat. Migrating cells from the fourth ventricle can still be observed. Bar is 50µ m. (B) TH-antibody staining of a P11 rat. The left-hand side SN at P11 is more rostral and shows a widespread localization of DA neurons. The right-hand side SN at P11 is more caudal and shows already the typical SN compacta band in the dorsal aspect, and a smaller number of displaced dopamine neurons outside the compacta area. Dorsal is up and ventral down. (C) Infrared IR-DIC optics images of SN neurons. Rat slices prepared according to the methods section. Infrared pictures of neurons in the SN as observed during the electrophysiological recording. (D) Double stained SN DA neuron at P3. The image on the left shows the TH staining. The image on the right shows the LFY filled neuron. Figure 1. PMID: 23284723.



Immunofluorescence Microscopy
Immunostaining of Vero cells infected with MVAIK, MV/RSV, and RSV. Monoclonal antibodies against RSV F or G protein and secondary antibody against mouse IgG conjugated with FITC were used for the detection of RSV F or G protein. Monoclonal antibody against MV HA protein and secondary antibody against mouse IgG conjugated with rhodamine were used for the detection of MV HA. The expression of measles N protein was stained with monoclonal antibody against measles N protein and secondary antibody conjugated with Alexa Fluor 568. Figure 3. PMID: 33669275.

References

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- Yue CH et al. Myeloid Zinc Finger 1 (MZF1) Maintains the Mesenchymal Phenotype by Down-regulating IGF1R/p38 MAPK/ERα Signaling Pathway in High-level MZF1-expressing TNBC cells. *Anticancer Res.* (2019)
- Lingli Li et al. Pharmacological screening using an FXN-EGFP cellular genomic reporter assay for the therapy of Friedreich ataxia. *PLoS One.* (2013)
- Ramírez-Latorre, José A Functional upregulation of Ca(2+)-activated K(+) channels in the development of substantia nigra dopamine neurons. *PloS One* (2012)

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