Datasheet for 611-746-127

Rabbit IgG (H&L) Antibody DyLight™ 405 Conjugated Pre-Adsorbed

Overview

Description:	Donkey Anti-Rabbit IgG (H&L) Antibody DyLight™ 405 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) - 611-746-127
Item No.:	611-746-127
Size:	100 µg
Applications:	IF, Multiplex
Reactivity:	Rabbit
Host Species:	Donkey

Product Details

Background:	Anti-Rabbit IgG (H&L) DyLight 405 Antibody generated in donkey detects reactivity to Rabbit 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:	Donkey Anti-Rabbit IgG Antibody DyLight 405™ Conjugated, Donkey Anti Rabbit IgG DyLight 405™ Conjugated Antibody
Host Species:	Donkey
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 405
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.0

Target Details

Reactivity:	Rabbit
Immunogen:	Rabbit IgG whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Rabbit 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-Donkey Serum, Rabbit IgG and Rabbit Serum. No reaction was observed against Bovine, Chicken, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Rat and Sheep Serum Proteins. This antibody will react with heavy chains of rabbit IgG and with light chains of most rabbit immunoglobulins.

Application Details

Suggested Applications:	IF, Multiplex (Based on references)
Application Note:	Anti-Rabbit IgG (H&L) DyLight 405 Antibody 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. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FLISA:	>1:20,000
IF:	>1:5,000
WB:	>1:10,000

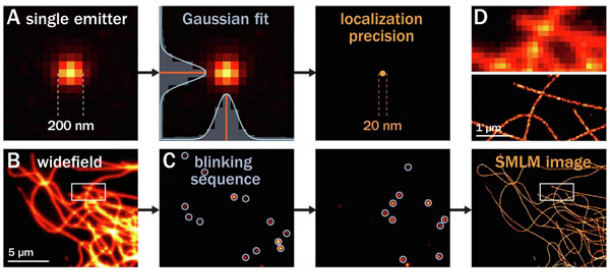
Formulation

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:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

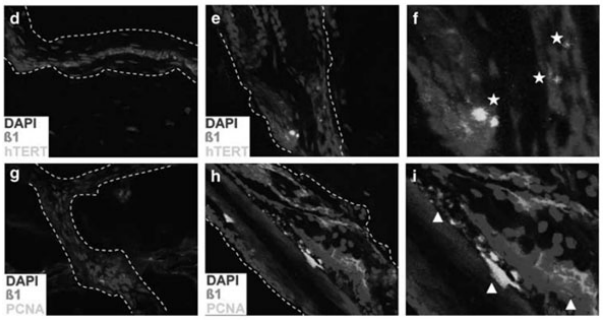
Shipping & Handling

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.

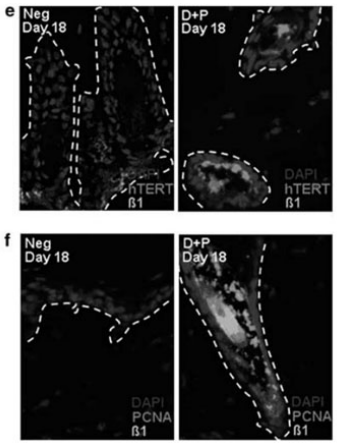
Images



Immunofluorescence Microscopy
Epifluorescence results of Donkey Anti-Rabbit IgG DyLight™405.
Principle of Single Molecule Localization Microscopy (SMLM). A. Epifluorescence image of a single emitter, showing the ~200 nm width of the Point Spread Function (PSF, left panel) that is fitted using Gaussian curves (center panel) to determine its position with a ~20 nm precision (right panel). B. Epifluorescence image of microtubules in a COS cell. C. During SMLM acquisition, fluorescence emission is switched to a blinking mode and thousands of frames are recorded, showing individual blinking events that can be fitted to localize each emitter. D. After processing, all localizations are plotted to generate the SMLM images (bottom panels). Top panel is a zoom corresponding to the box highlighted in the full image and shows the gain in resolution with much thinner microtubules (top panels). Fig. 1. PMID: 31078795.



Immunofluorescence Microscopy
Immunofluorescence results using Donkey Anti-Rabbit IgG DyLight™405.
After application of hTERT–DNA–PEI complex, hTERT protein expression promoted proliferation of hair follicle stem cells and enhanced hair growth. Immunofluorescent staining of hTERT and PCNA in dorsal skin treated with DNA–PEI complex (f, stars; i, triangles) at day 40 after wounding compared with non-treated control (d, g), respectively. (f, i) Displayed higher magnification micrographs of (e) and (h), respectively. Figure 6. PMID: 21593794.

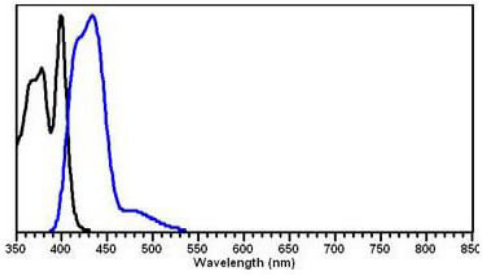


Immunofluorescence Microscopy
Immunofluorescence results using Donkey Anti-Rabbit IgG DyLight™405.
(e–f) The expression of hTERT (e) and PCNA (f) was detected by immunofluorescence microscopy using the Abs indicated. The transfected groups were shown as 'D+P' and non-transfected group were shown as 'Neg' at day 18 after transfection. The color reproduction of this figure is available on the html full text version of the manuscript. Figure 4. PMID: 21593794.

Diagram
Properties of DyLight™ Conjugates.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	ε (M^{-1} cm^{-1})	Similar Dyes
Blue		405	400/420	30,000	Alexa™ 405, Cascade Blue
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®,TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800

Diagram



References

- Jimenez A et al. About samples, giving examples: optimized single molecule localization microscopy. *Methods.* (2020)
- Jan HM et al. The use of polyethylenimine–DNA to topically deliver hTERT to promote hair growth. *Gene Ther.* (2012)

Disclaimer