

## Datasheet for 603-146-126

**Chicken IgG (H&L) Antibody DyLight™ 405 Conjugated Pre-Adsorbed****Overview**

<b>Description:</b>	Goat Anti-Chicken IgG (H&L) Antibody DyLight™ 405 Conjugated (Min X Bv Gt GP Ham Hs Hu Ms Rb Rt & Sh Serum Proteins) - 603-146-126
<b>Item No.:</b>	603-146-126
<b>Size:</b>	100 µg
<b>Applications:</b>	IF, Multiplex
<b>Reactivity:</b>	Chicken
<b>Host Species:</b>	Goat

**Product Details**

<b>Background:</b>	Anti-Chicken IgG DyLight Antibody generated in goat detects chicken IgY. 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 heavy and light chains of the antibody molecule are present.
<b>Synonyms:</b>	goat anti-Chicken IgG DyLight™405 Conjugated Antibody, goat anti-Chicken IgG Antibody DyLight™405 Conjugation, Chicken Secondary Antibody, goat anti-Chicken IgY DyLight™405
<b>Host Species:</b>	Goat
<b>Specificity:</b>	IgG (H&L)
<b>Conjugate:</b>	DyLight™ 405
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG
<b>F/P Ratio:</b>	2.0

**Target Details**

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

## Application Details

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

## Formulation

<b>Physical State:</b>	Lyophilized
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
<b>Reconstitution Volume:</b>	100 µL
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

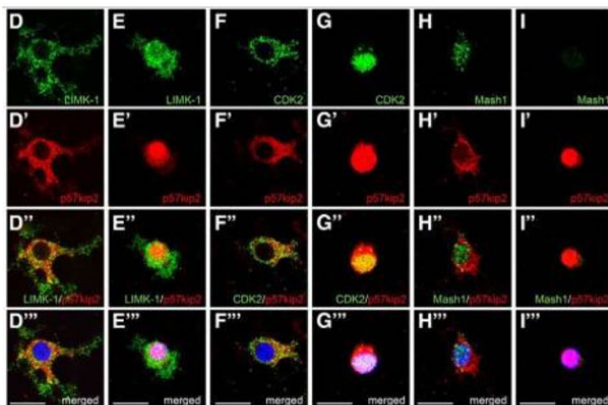
## Shipping & Handling

<b>Shipping Condition:</b>	Ambient
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**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.

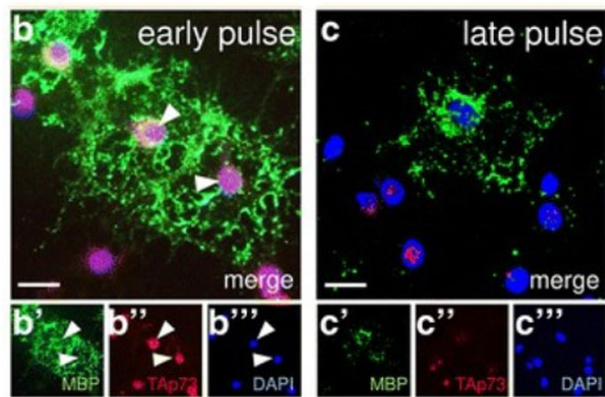
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images









### Immunofluorescence Microscopy

Colocalization of p57kip2 with oligodendroglial binding proteins. Using primary antibodies: rabbit anti-p57kip2 [1/500], rabbit anti-LIMK-1 (1/500), mouse anti-CDK2 (1/75) and mouse anti-Mash1 (1/200), secondary antibodies Alexa Fluors and DyLight 405-conjugated antibodies (p/n# 603-146-126), and nuclei were stained with (DAPI). (D-I''') Representative images illustrating nuclear and cytoplasmic p57kip2 localization within oligodendroglial cells after 6 d under differentiation conditions. Colocalization with both LIMK-1 (D-D''',E-E''') and CDK2 (F-F''',G-G''') was observed, whereas only nuclear coexpression of Mash1 and p57kip2 in immature oligodendroglial cells (H-H''', I-I''') was found. Scale bars, 20 µm. Fig5. PMID: 25609610.



### Immunofluorescence Microscopy

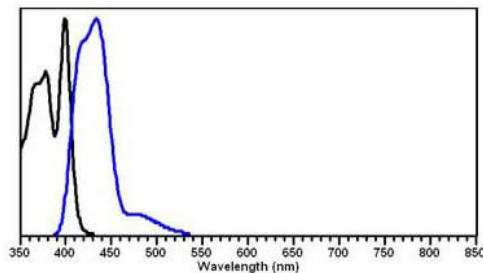
p73 protein induction in response to teriflunomide stimulation. Primary antibodies mouse anti-MBP (1/250) and rabbit anti-p73 (1/100), secondary antibodies Alexa Fluors and DyLight 405-conjugated antibody (p/n 603-146-126), and nuclei were stained with (DAPI). a-c''' Double immunostaining and its quantification confirmed that early teriflunomide pulses (a 24 h pulse stimulation [scheme II] with teriflunomide followed by a 48-hr) result in cells displaying strong TAp73 signals (arrowheads in b) correlating also with MBP positivity (dashed bars in a). Late teriflunomide pulses (a short-term pulse at a later time point from 48 to 72 h [scheme III] ) could not boost both protein markers. Scale bars, 20 µm. d-g Western blot analysis confirmed that early short-term teriflunomide pulses (a 24 h pulse stimulation [scheme II] result in a strong induction of CNPase. Fig. 4. PMID: 29534752.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	$\epsilon$ (M <sup>-1</sup> cm <sup>-1</sup> )	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

Properties of DyLight™ Fluorescent Dyes.

### Diagram



## References

- Gottle P et al. Rescuing the negative impact of human endogenous retrovirus envelope protein on oligodendroglial differentiation and myelination. *Glia*. (2019)
- Göttle et al. Teriflunomide promotes oligodendroglial differentiation and myelination. *Journal of Neuroinflammation* (2018)
- Göttle et al. Oligodendroglial maturation is dependent on intracellular protein shuttling. *The Journal of Neuroscience* (2015)

## Disclaimer

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