

Datasheet for 611-1502**Rabbit IgG (H&L) Antibody Alkaline Phosphatase Conjugated****Overview**

Description:	Goat Anti-Rabbit IgG (H&L) Antibody Alkaline Phosphatase Conjugated - 611-1502
Item No.:	611-1502
Size:	1 mg
Applications:	Dot Blot, ELISA, WB
Reactivity:	Rabbit
Host Species:	Goat

Product Details

Background:	Anti-Rabbit IgG (H&L) Alkaline Phosphatase Antibody generated in goat 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 complement 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-Rabbit IgG Antibody Alkaline Phosphatase Conjugation, goat anti-Rabbit IgG Alk Phos Conjugated Antibody, goat anti-rabbit IgG heavy and light chain Antibody conjugated to Alkaline phosphatase
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	Alkaline Phosphatase (AP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Rabbit
Immunogen Type:	Native Protein
Immunogen:	Anti-Rabbit IgG (H&L) was produced by repeated immunization with rabbit whole IgG molecule in goat.
Purity/Specificity:	Anti-Rabbit IgG (H&L) Antibody Alkaline Phosphatase conjugated 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-Alkaline Phosphatase (calf intestine), anti-Goat Serum, Rabbit IgG and Rabbit Serum.

Application Details

Tested Applications:	Dot Blot, ELISA, WB
Application Note:	Anti-Rabbit IgG (H&L) alkaline phosphatase conjugated antibody has been tested by ELISA, dot blot, and western blot and is suitable for immunoblotting (western or dot blot), ELISA, immunohistochemistry as well as other alkaline phosphatase-antibody based enzymatic assays requiring lot-to-lot consistency.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:3,000 - 1:25,000
IHC:	1:200 - 1:1,000
WB:	1:1,000 - 1:4,000

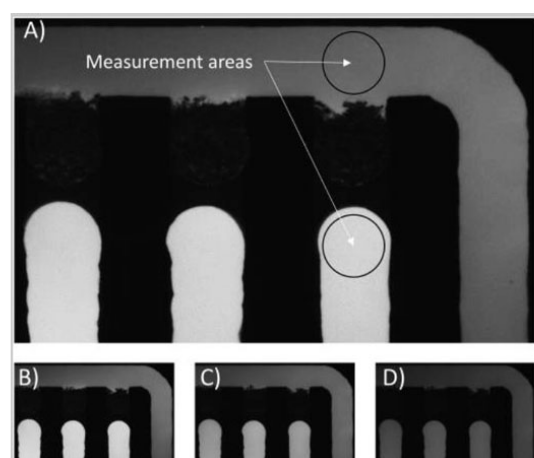
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.05 M Tris Chloride, 0.15M Sodium Chloride, 0.001M Magnesium Chloride, 0.0001M Zinc Chloride, 50% (v/v) Glycerol; pH 8.0
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Shipping & Handling

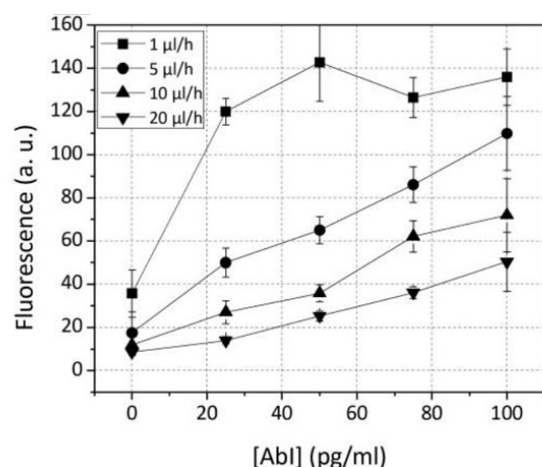
Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C before opening. DO NOT FREEZE. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing alkaline phosphatase conjugates will result in a substantial loss of enzymatic activity.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



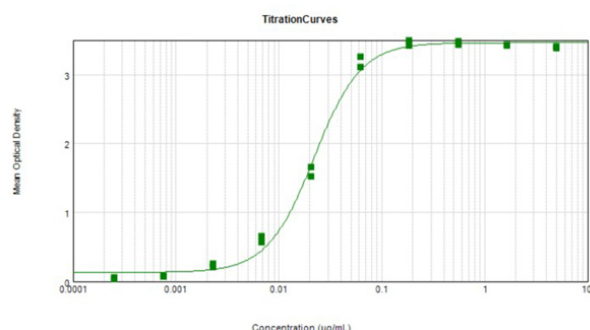
Figure

Typical experiment image where the complexes Ag–AbI–AbII are attached to the nanoparticles trapped in the magnetic traps and the fluorogenic substrate is flowed at different rates, where the measurement areas selected for the fluorescence analysis are shown. Measurement with a flow rate of (a) 1 µl/h, (b) 2 µl/h, (c) 5 µl/h, and (d) 10 µl/h. Experiment with anti-rabbit IgG labeled alkaline phosphatase was used (p/n 611-1502) and an anti-biotin rabbit IgG (p/n 100-4198) [AbI] concentration of 100 pg/ml. FIG. 6. PMID: 32038740.



Figure

Typical experiment image where the complexes Ag–AbI–AbII are attached to the nanoparticles trapped in the magnetic traps and the fluorogenic substrate is flowed at different rates, where the measurement areas selected for the fluorescence analysis are shown. Measurement with a flow rate of (a) 1 µl/h, (b) 2 µl/h, (c) 5 µl/h, and (d) 10 µl/h. Experiment with anti-rabbit IgG labeled alkaline phosphatase was used (p/n 611-1502) and an anti-biotin rabbit IgG (p/n 100-4198) [AbI] concentration of 100 pg/ml. FIG. 6. PMID: 32038740.

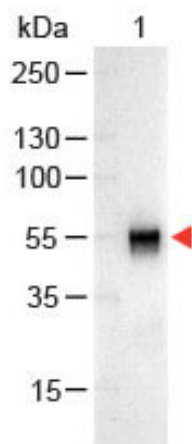


ELISA

ELISA results of Goat Anti-Rabbit IgG Antibody Alkaline Phosphatase Conjugated tested against purified Rabbit IgG protein. Each well was coated in duplicate with 10 µg of Rabbit IgG (p/n 011-0102). The starting dilution of antibody was 5 µg/ml and the X-axis represents the Log10 of a 3-fold dilution. The titer is 1:45,700. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% fish gelatin as blocking buffer and TMB substrate p/n TMBE-1000.

Dot Blot

Dot Blot of Rabbit IgG Antibody Alkaline Phosphatase Conjugated. Antigen: Rabbit IgG. Load: Lane 1 - 200ng, Lane 2 - 66.7ng, Lane 3 - 22.2ng, Lane 4 - 7.4ng, Lane 5 - 2.5ng. Primary antibody: none. Secondary antibody: Rabbit IgG Antibody Alkaline Phosphatase Conjugated at 1:1,000 for 60 min at RT. Block: MB-070 for 60 min at RT. Reaction visualized using alkaline phosphatase substrate for 30 seconds at RT.



Western Blot

Western Blot of Goat anti-Rabbit IgG Antibody Alkaline Phosphatase Conjugated. Lane 1: Rabbit IgG. Lane 2: None. Load: 100 ng per lane. Primary Antibody: None. Secondary antibody: Alkaline Phosphatase goat secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 55 and 28 kDa, 55 kDa for Rabbit IgG. Other Band(s): None.

References

- Guevara-Pantoja PE et al. Micro–nanoparticles magnetic trap: Toward high sensitivity and rapid microfluidic continuous flow enzyme immunoassay. *Biomicrofluidics*. (2020)
- Mueller A et al. In vitro assembly of Tobacco mosaic virus coat protein variants derived from fission yeast expression clones or plants. *J Virol Methods*. (2010)
- Copello JA et al. Lack of effect of cADP-ribose and NAADP on the activity of skeletal muscle and heart ryanodine receptors. *Cell Calcium*. (2001)
- DeLamatre JG et al. Influence of dietary fat on the effect of endotoxin on murine hepatic peroxisomes. *Hepatology*. (1996)

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