

## Datasheet for 606-109-129

**Guinea Pig IgG (H&L) Antibody Texas Red™ Conjugated Pre-Adsorbed****Overview**

|                      |   |
|----------------------|---|
| <b>Description:</b>  | Goat Anti-Guinea Pig IgG (H&L) Antibody Texas Red™ Conjugated (Min X Bv Ch Gt Ham Hs Hu Ms Rb Rt & Sh Serum Proteins) - 606-109-129 |
| <b>Item No.:</b>     | 606-109-129   |
| <b>Size:</b>         | 1 mg  |
| <b>Applications:</b> | IF, Multiplex, Other  |
| <b>Reactivity:</b>   | Guinea Pig  |
| <b>Host Species:</b> | Goat  |

**Product Details**

|                      |   |
|----------------------|---|
| <b>Background:</b>   | Anti-Guinea Pig IgG Texas Red Antibody generated in goat detects guinea pig 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 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. |
| <b>Synonyms:</b>     | Goat Anti-Guinea Pig IgG Texas red™ Conjugation, Goat Anti Guinea Pig IgG Texas Red™ conjugated   |
| <b>Host Species:</b> | Goat  |
| <b>Specificity:</b>  | IgG (H&L)   |
| <b>Conjugate:</b>    | Texas Red®  |
| <b>Clonality:</b>    | Polyclonal  |
| <b>Format:</b>       | IgG   |

**Target Details**

|                            |  |
|----------------------------|--|
| <b>Reactivity:</b>         | Guinea Pig   |
| <b>Immunogen:</b>          | Guinea Pig IgG whole molecule  |
| <b>Purity/Specificity:</b> | This product was prepared from monospecific antiserum by immunoaffinity chromatography using Guinea Pig 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, Guinea Pig IgG and Guinea Pig Serum. No reaction was observed against Bovine, Chicken, Goat, Hamster, Horse, Human, Mouse, Rabbit, Rat and Sheep Serum Proteins. |

## Application Details

|                                |   |
|--------------------------------|---|
| <b>Suggested Applications:</b> | IF, Multiplex, Other (Based on references)  |
| <b>Application Note:</b>       | This product 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>FC:</b>                     | 1:500 - 1:2,500   |
| <b>FLISA:</b>                  | 1:10,000 - 1:50,000   |
| <b>IF:</b>                     | 1:1,000 - 1:5,000   |

## Formulation

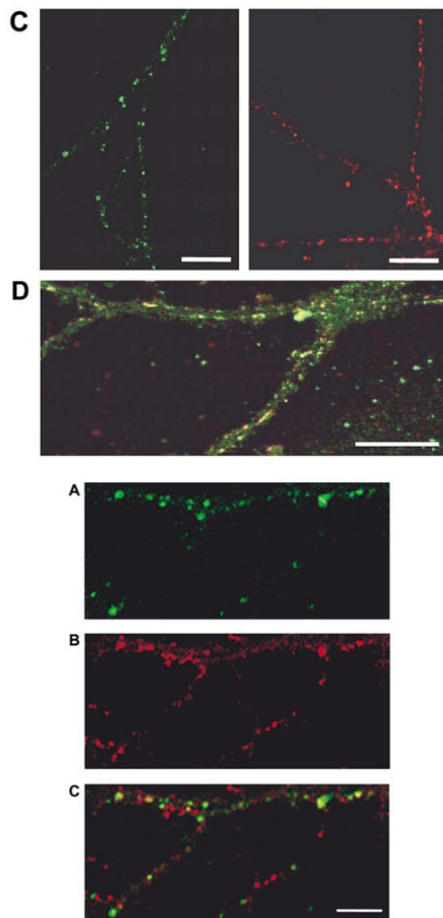
|                               |  |
|-------------------------------|--|
| <b>Physical State:</b>        | Lyophilized  |
| <b>Concentration:</b>         | 1.0 mg/mL by UV absorbance at 280 nm                                   |
| <b>Buffer:</b>                | 0.02 M Potassium Phosphate, 0.15 M Sodium 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> | 1.0 mL   |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Ambient |
|----------------------------|---------|

|                           |   |
|---------------------------|---|
| <b>Storage Condition:</b> | 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. |
| <b>Expiration:</b>        | Expiration date is one (1) year from date of receipt.   |

## Images

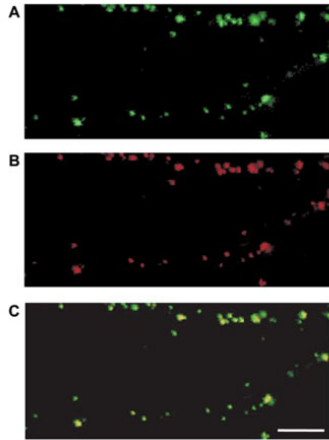


### Immunofluorescence Microscopy

(C) Surface distribution of anti-GluR1-4R (green) and anti-GluR1-4GP (red) immunoreactivity on living hippocampal neurons in culture (14 DIV). (D) Colocalization (yellow) of antiGluR1-4R (green) and anti-GluR1-4GP (red) immunoreactivity on the surface of hippocampal neurons. Neuronal cultures were first stained with the anti-GluR1-4R (green) antibody, followed by re-staining with the anti-GluR1-4GP (red) antibody under non-permeabilised conditions (as described at Fig. 1A, without the LTP induction). Scale bars 20 μm. Fig 1. PMID: 11640924.

### Immunofluorescence Microscopy

Changes in AMPAR expression on the surface of living hippocampal neurons following high K<sup>+</sup> treatment. Dual labelling of hippocampal dendrites showing AMPAR clusters labelled before (A; green and yellow) and following (B; red) the high K<sup>+</sup> treatment. (C) Colocalization (yellow) of anti-GluR1-4R (green) and anti-GluR1-4GP (red) immunoreactivity on the surface of hippocampal neurons. Note the marked increase in new AMPAR clusters (C; red only). Scale bar 5 μm. Fig 3. PMID: 11640924.

**Immunofluorescence Microscopy**

Dual labelling of hippocampal dendrites before (A; green) and following (B; red) the high K<sup>+</sup> treatment in the presence of an NMDAR antagonist (5  $\mu$ M L-689,560). Colocalization (yellow) of anti-GluR1-4R (green) and anti-GluR1-4GP (red) immunoreactivity on the surface of hippocampal neurons. Note the absence of new (red only) AMPAR clusters on panel C. Scale bar 5  $\mu$ m. Fig. 4. PMID: 11640924.

**References**

- Pickard L et al. Transient synaptic activation of NMDA receptors leads to the insertion of native AMPA receptors at hippocampal neuronal plasma membranes. *Neuropharmacology*. (2001)

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.