

**Datasheet for 610-4910****Mouse (kappa chain) Antibody Texas Red™ Conjugated****Overview**

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
| <b>Description:</b>  | Rabbit Anti-Mouse κ (kappa chain) Antibody Texas Red™ Conjugated - 610-4910 |
| <b>Item No.:</b>     | 610-4910                                                                    |
| <b>Size:</b>         | 1 mg                                                                        |
| <b>Applications:</b> | IF, Multiplex                                                               |
| <b>Reactivity:</b>   | Mouse                                                                       |
| <b>Host Species:</b> | Rabbit                                                                      |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Anti-Mouse κ (kappa chain) (RABBIT) Antibody generated in rabbit detects specifically Mouse kappa light chain. Immunoglobulins are heterotetramers composed of 2 immunoglobulin heavy and 2 immunoglobulin light chains. The immunoglobulin light chain is the small polypeptide subunit of an antibody (immunoglobulin). The light chains can be categorized into kappa type or lambda type and both are used to construct the antigen binding F(ab) region of an antibody along with the variable region of the heavy chain. 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. Anti-Mouse IgG kappa is conjugated to Texas Red™. |
| <b>Synonyms:</b>     | Rabbit Anti-Mouse κ (kappa chain) Antibody Texas Red™ Conjugated, Rabbit Anti-Mouse kappa Antibody Texas Red™ Conjugation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Specificity:</b>  | κ (kappa chain)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Conjugate:</b>    | Texas Red®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>F/P Ratio:</b>    | 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Target Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity:</b>         | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen:</b>          | Mouse kappa light chain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity/Specificity:</b> | This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse antigens 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-Rabbit Serum, Mouse IgG and Mouse Serum. Solid phase adsorption (s) against a panel of Mouse IgG lambda, IgM lambda and IgA lambda proteins was performed. Specificity was confirmed by ELISA at less than 1% cross reactivity against other human heavy or light chain isotypes. |

## Application Details

|                                |                                                                                                                                                                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suggested Applications:</b> | IF, Multiplex (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)                           |

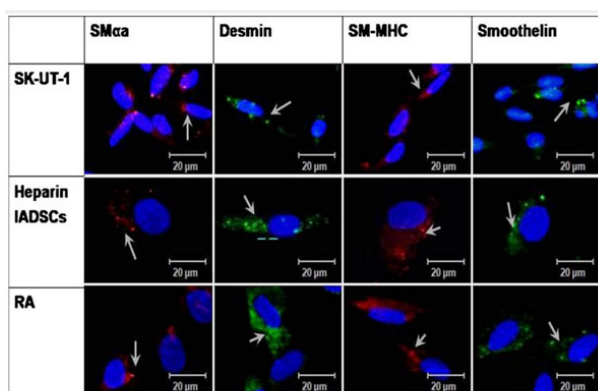
## Shipping & Handling

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

**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

Isolated hADSCs (IADSCs) were differentiated into SMCs using retinoic acid (RA), heparin was used as a positive control, while SK-UT-1 cells was used as a SMC control. Expression of SMC markers smooth muscle alpha actin (SM-αa, red, Texas Red Conjugated anti-Mouse IgG2, γ2a chain specific, p/n 610–4941), desmin (green, Fluorescein Conjugated anti-Mouse IgG1, γ1 chain specific, p/n 610–4240), smooth muscle myosin heavy chain (SM-MHC, red, Texas Red Conjugated anti-Mouse κ, kappa chain specific, p/n 610–4910), and smoothelin (green, Fluorescein Conjugated anti-Mouse IgG1, γ1 chain specific, p/n 610–4240) in differentiated SMCs was determined by indirect immunofluorescence. Nuclei were counter stained with DAPI (blue). Expression of all four markers can be seen in all the cells, particularly in RA differentiated SMCs. Fig. 5. PMID: 21373882.

## References

- de Villers JA et al. Influence of low intensity laser irradiation on isolated human adipose derived stem cells over 72 hours and their differentiation potential into smooth muscle cells using retinoic acid. *Stem Cell Rev Rep.* (2011)

## 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.