

**Datasheet for 010-0141**

## Mouse IgG2a isotype Control

### Overview

|                      |                                        |
|----------------------|----------------------------------------|
| <b>Description:</b>  | Mouse IgG2a Isotype Control - 010-0141 |
| <b>Item No.:</b>     | 010-0141                               |
| <b>Size:</b>         | 1 mg                                   |
| <b>Applications:</b> | SDS-PAGE, FC, WB                       |
| <b>Origin:</b>       | Mouse                                  |

### Product Details

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>        | Isotype controls are important for Flow Cytometry and have no specificity for target cells within a particular experiment. Their purpose is to confirm the specificity of primary antibody binding that it is not a result of non-specific Fc receptor binding to cells or other cellular protein interactions. Isotype controls need to be matched to the specific primary Abs (species and isotype, including heavy and light chains) being used. |
| <b>Synonyms:</b>          | MOUSE IgG2a isotype Control                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species of Origin:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Clone ID:</b>          | M2A                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Format:</b>            | IgG2a                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Type:</b>              | Native Protein                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### Target Details

|                            |                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity/Specificity:</b> | Mouse Isotype control has been prepared from concentrated cell culture supernatant by immunoaffinity chromatography using protein A. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Mouse IgG2a and anti-Mouse Serum. Isotyping assay resulted the material is non-reactive with antisera to mouse IgG1, IgG2b, IgG3, IgM, and IgA. Confirmed by SDS-PAGE. |
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### Application Details

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|-----------------------------|----------|
| <b>Tested Applications:</b> | SDS-PAGE |
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| <b>Suggested Applications:</b> | FC, WB (Based on references)                                                                                                                                                                                                |
| <b>Application Note:</b>       | Mouse IgG2a isotype control has been tested by SDS-Page and can be utilized as a control or standard reagent in Flow cytometry, Western Blotting, and ELISA experiments where determination of sample isotype is important. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                             |
| <b>ELISA:</b>                  | User Optimized                                                                                                                                                                                                              |
| <b>FC:</b>                     | 1:1000-1:5000                                                                                                                                                                                                               |
| <b>FLISA:</b>                  | User Optimized                                                                                                                                                                                                              |
| <b>IF:</b>                     | User Optimized                                                                                                                                                                                                              |
| <b>WB:</b>                     | User Optimized                                                                                                                                                                                                              |

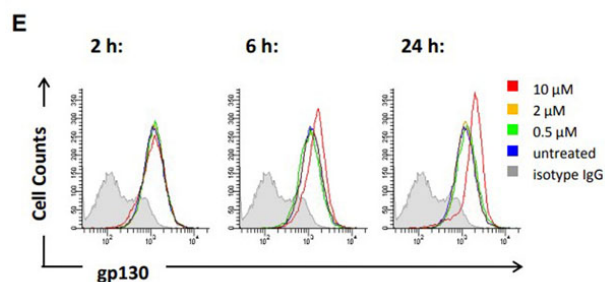
## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid                                                     |
| <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>     | None                                                       |

## Shipping & Handling

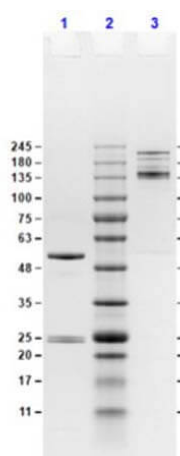
|                            |                                                                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Wet Ice                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage Condition:</b>  | Store vial at 4° C prior to opening. 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



### Flow Cytometry

(E) Cell surface-bound gp130 was down-regulated in OVCAR-8 by SC144 at the indicated concentration and time. After treatment, cells were collected and stained with anti-gp130 (B-R3) antibody and analyzed by FACS. Upper panel, one of three representative experiments. Lower panels, statistical analyses of data from the three experimental repeats. Error bars = SEM. \*  $P < 0.05$ , \*\*  $P < 0.01$ , paired t test. Mouse IgG2a (p/n 010-0141). Supplementary Figure S2. PMID: 23536726.



### SDS-PAGE

SDS-Page Results of Mouse IgG2a Isotype Control.

Lane 1: Mouse IgG2a Isotype Control Reduced [1.0 μg].

Lane 2: Opal Prestained Molecular Weight Marker (p/n MB-210-0500).

Lane 3: Mouse IgG2a Isotype Control Non-Reduced [1.0 μg]. 4-20% gel. Coomassie stained.

## References

- Xu S, Grande F, Garofalo A, Neamati N. Discovery of a novel orally active small-molecule gp130 inhibitor for the treatment of ovarian cancer. *Mol Cancer Ther.* (2013)

## Disclaimer

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