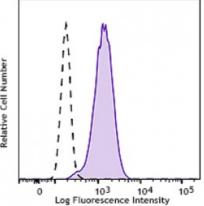
## **Product Data Sheet**

## Brilliant Violet 510<sup>™</sup> anti-mouse FcεRlα

| Catalog # / Size:  | 1271635 / 50 μg   |                      |
|--------------------|---|----------------------|
| Clone:             | MAR-1   |                      |
| Isotype:           | Hamster IgG   |                      |
| <b>Reactivity:</b> | Mouse   | a pe                 |
| Preparation:       | The antibody was purified by affinity<br>chromatography and conjugated with<br>Brilliant Violet 510 <sup>™</sup> under optimal<br>conditions. The solution is free of<br>unconjugated Brilliant Violet 510 <sup>™</sup> and<br>unconjugated antibody. | Relative Cell Number |
| Formulation:       | Phosphate-buffered solution, pH 7.2,<br>containing 0.09% sodium azide and BSA<br>(origin USA).  | Mouse                |
| Concentration:     | 0.5 mg/ml   | stained<br>MAR-1     |



Mouse mast cell line MC/9 was stained with FcεRIα (clone MAR-1) Brilliant Violet 510<sup>™</sup> (filled histogram) or Armenian hamster IgG Brilliant Violet 510<sup>™</sup> isotype control (open histogram).

## **Applications:**

| Applications:              | Flow Cytometry   |
|----------------------------|--|
| Recommended<br>Usage:      | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is $\leq 0.5 \ \mu$ g per million cells in 100 $\mu$ l volume. It is recommended that the reagent be titrated for optimal performance for each application.   |
|                            | This product is subject to proprietary rights of Sirigen Inc. and is made and sold<br>under license from Sirigen Inc. The purchase of this product conveys to the buyer<br>a non-transferable right to use the purchased product for research purposes only.<br>This product may not be resold or incorporated in any manner into another<br>product for resale. Any use for therapeutics or diagnostics is strictly prohibited.<br>This product is covered by U.S. Patent(s), pending patent applications and foreign<br>equivalents. |
| Application<br>Notes:      | Additional reported applications (for relevant formats of this clone) include: depletion <sup>2</sup> , immunohistochemistry of frozen sections (OCT embedded <sup>2</sup> ).  |
| Application<br>References: | 1. Arinobu Y, <i>et al.</i> 2005. <i>P. Natl. Acad. Sci. USA</i> 102:18105.<br>2. Yamaguchi M, <i>et al.</i> 2001. <i>Int. Immunol.</i> 13:843.  |
|                            |  |

| Description: | FccRl $\alpha$ is a transmembrane protein belonging to the Ig superfamily. FccRl $\alpha$ forms<br>a tetrameric complex with one $\beta$ and two $\gamma$ -subunits. The FccRl complex plays an<br>important role in triggering IgE-mediated allergic reactions. It is abundantly  |
|--------------|--|
|              | expressed on mast and basophils and up-regulated by the presence of IgE.<br>Following stimulation via $Fc\epsilon RI\alpha$ , mast cells and basophils release bioactive<br>chemical mediators such as histamine, resulting in the initiation of allergic<br>reactions. Cross linking of the high-affinity receptor for IgE on tissue mast cells<br>triggers immediate hypersensitivity with local symptoms. The MAR-1 monoclonal<br>antibody reacts with the $Fc\epsilon RI\alpha$ subunit. |

Antigen 1. Arinobu Y, et al. 2005. P. Natl. Acad. Sci. USA 102:18105.

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