

## Anti-TIM-2 [RMT2-14] VivopureX 25 mg Ab01092-2.3-VXX

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric mouse antibody was made using the variable domain sequences of the original Rat IgG2a format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG2a, [Fc Silent™](#), Lambda

**Clone Number:** RMT2-14

**Alternative Name(s) of Target:** TIMD2; T Cell Immunoglobulin Mucin-2; T Cell immunoglobulin and mucin domain protein 2; TIM3

**UniProt Accession Number of Target Protein:** Q8R183

**Published Application(s):** Blocking, functional assays, WB, FC, IHC

**Published Species Reactivity:** Mouse

**Immunogen:** This antibody was raised by immunising Sprague Dawley rats with TIM-2-Ig consisting of the extracellular domain (aa 1-230 of mouse TIM-2) and the Fc portion of mouse IgG2a, emulsified in complete Freund's adjuvant and then fusing lymph node cells from the immunized rats with P3U1 myeloma cells.

**Specificity:** This antibody is specific for murine TIM-2, a transmembrane protein that is expressed on activated T cells and preferentially on differentiated Th2 cells. A blockade of TIM-2/TIM-2 ligand interaction results in T cell hyperproliferation and Th2 cytokine production. TIM-2 plays a critical role in the development of atopic disease and other Th2-biased immune responses.

**Application Notes:** This antibody has been used in various FACS analyses, for instance, to evaluate the expression of TIM family members on mouse mast cells (Nakae et al, 2007) and to block the H-ferritin binding to TIM-2/L5178Y cells (Kawamoto et al, 2011). This antibody has been used in FACS and immunohistochemistry analyses to show that TIM-2 is expressed on mouse fetal hepatocytes (Watanabe et al, 2007). This antibody has also been used in Western Blots and for blocking experiments in ferritin binding analysis, which suggests that Tim-2 is the H-ferritin receptor on oligodendrocytes (Todorich et al, 2008). In addition, this antibody has been used in collagen-induced arthritis (CIA) models to determine whether TIM-2 contributes to the development of T helper (Th) 1 or Th17 cells and joint inflammation (Kawamoto et al, 2011).

**Antibody First Published in:** Nakae et al. TIM-1 and TIM-3 enhancement of Th2 cytokine production by mast cells. Blood. 2007 Oct 1; 110(7): 2565–2568. [PMID:17620455](#)

**Note on publication:** Describe the original generation of this clone RMT2-1, together with another clone

(RMT2-14), of this anti-mouse TIM-2 antibody and their subsequent use for evaluation of the expression of TIM family members on mouse mast cells.

## Product Form

**Size:** 25 mg VivopureX products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are formulated without preservatives. These antibodies are chimerized to have an Fc domain matching their target species to reduce immunogenicity and give you the optimal effector function for your experiment. As a result VivopureX products are the ideal choice for in vivo research applications.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** All VivopureX products are formulated in PBS only without addition of preservatives. To ensure optimal storage and prevent microbial contamination, only open and dispense under sterile conditions.

**Concentration:**  $\geq 1$ mg (see vial label for exact conc)

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.