



# Mouse Anti-Mouse IL-9 Monoclonal antibody, clone 9C1 (CABT-L4457)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

The 9C1 monoclonal antibody reacts with mouse IL-9, a pleiotropic cytokine expressed by Th9 cells, Th2 cells, Th17 cells, regulatory T cells, NKT cells, ILC2s, and mast cells. IL-9 promotes mast cell and T cell proliferation, stimulates mast cell accumulation in tissues, promotes ILC survival, enhances class-switching to IgE in B cells and alters haematopoietic progenitor cell activity. Additionally, IL-9 enhances mucus production from airway epithelial cells and alters barrier function in the intestines. IL-9 is thought to contribute to asthma. The 9C1 antibody has been reported to block the bioactivity of IL-9.

|                    |                                                                                             |
|--------------------|---------------------------------------------------------------------------------------------|
| Target             | Mouse IL-9                                                                                  |
| Immunogen          | Mouse IL-9-OVA complex                                                                      |
| Isotype            | IgG2a                                                                                       |
| Source/Host        | Mouse                                                                                       |
| Species Reactivity | Mouse                                                                                       |
| Clone              | 9C1                                                                                         |
| Purification       | Protein G purified.<br>Purity>95%. Determined by SDS-PAGE                                   |
| Conjugate          | Functional Grade                                                                            |
| Applications       | in vivo IL-9 neutralization                                                                 |
| Molecular Weight   | 150 kDa                                                                                     |
| Format             | 0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility |

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|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Concentration</b> | Lot specific                                                                                                                                                                                                |
| <b>Size</b>          | 5 mg                                                                                                                                                                                                        |
| <b>Buffer</b>        | PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]<br><br>Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay<br>Related dilution buffer: CABT-LB04 |
| <b>Preservative</b>  | None                                                                                                                                                                                                        |
| <b>Storage</b>       | The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.                                                                                     |
| <b>Ship</b>          | Wet ice                                                                                                                                                                                                     |

## BACKGROUND

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| <b>Introduction</b> | Supports IL-2 independent and IL-4 independent growth of helper T-cells.                                                                                                                                                                                             |
| <b>Keywords</b>     | IL9;interleukin 9;interleukin-9;homolog of mouse T cell and mast cell growth factor 40;HP40;IL 9;P40;p40 cytokine;p40 T cell and mast cell growth factor;T cell growth factor p40;cytokine P40;T-cell growth factor p40;p40 T-cell and mast cell growth factor;IL-9; |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                                                   |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Official Symbol</b> | interleukin 9                                                                                                                                                                                                                                                                     |
| <b>Synonyms</b>        | IL9; interleukin 9; interleukin-9; homolog of mouse T cell and mast cell growth factor 40; HP40; IL 9; P40; p40 cytokine; p40 T cell and mast cell growth factor; T cell growth factor p40; cytokine P40; T-cell growth factor p40; p40 T-cell and mast cell growth factor; IL-9; |
| <b>References</b>      | Monteiro, M., et al. (2015). "IL-9 Expression by Invariant NKT Cells Is Not Imprinted during Thymic Development." J Immunol 195(7): 3463-3471. PubMed;                                                                                                                            |