# **Technical Data Sheet**

# Purified Mouse Anti-Human IL-9

#### **Product Information**

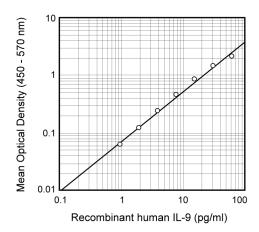
558088 **Material Number:** 0.5 mg Size: **Concentration:** 0.5 mg/ml MH9A4 Clone:

Recombinant human IL-9 protein Immunogen: Mouse (C57BL/6) IgG2b, κ Isotype: QC Testing: Human Reactivity:

Aqueous buffered solution containing ≤0.09% sodium azide. Storage Buffer:

## Description

The MH9A4 monoclonal antibody reacts with human interleukin-9 (IL-9), 14.1 kDa T cell-derived multifunctional cytokine . IL-9 induces the proliferation and differentiation of various lymphoid (eg, T lymphocytes, B lymphocytes, mast cells, eosinophils, and neutrophils) and hemopoietic cells, It potentiates the interleukin-4-induced IgG and IgE responses by human B lymphocytes. Further, IL-9 has been implicated in human allergic disorders.



Curve from a sandwich ELISA that measures IL-9 protein levels. It was generated using the purified MH9A4 antibody as capture antibody, doubling dilutions of recombinant human IL-9 protein as standard and biotinylated MH9A3 antibody as detection antibody Avidin-HRP and the TMB substrate were used to develop the detection stage and mean OD was measured at 450 -570 nm. The standard curve is displayed as the concentration of recombinant human IL-9 in pg/ml versus the microwell absorbance (in circles).

## **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

## **Application Notes**

Application

ELISA Capture	Routinely Tested

#### **Recommended Assay Procedure:**

This antibody is useful as a capture antibody in ELISA assays measuring human IL-9 protein levels. This antibody is non-blocking, it does not block the binding of IL-9 with the IL-9 receptor. The MH9A4 mAb can be used as a capture antibody in a sandwich ELISA with Biotinylated MH9A3 anti-human IL-9 protein (Cat. No. 558089) as the detector antibody, with recombinant human IL-9 protein as the standard. The MH9A4 antibody should be titrated between 1-4 µg/ml to determine its optimal ELISA coating concentration. To obtain linear standard curves, doubling dilutions of the recombinant human IL-9 protein ranging from 1.0 to 125 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, see Chapter 7: ELISA for specifically measuring the levels of cytokines, chemokines, and inflammatory mediators and their receptors, 2003. Techniques for Immune Function Analysis application Handbook 1st Edition. BD Biosciences. Available for download as the Immune Function Application handbook from http://www.bdbiosciences.com/cgi-bin/literature/archive?type=2&brand=0.

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Note: This ELISA antibody pair shows no crossreactivity with the following recombinant human cytokines: IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, IL5, IL-6, IL-7, IL-8, IL-10, IL-12p40, IL-12p70, IL-13, IL-18, IFN $\gamma$ , gp130, TNF, 4-1BB. This ELISA antibody pair also shows no cross-reactivity with recombinant mouse IL-9.

# **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
558089	Biotin Mouse Anti-Human IL-9	0.5 mg	МН9А3	
554058	HRP Avidin	1.0 ml	(none)	
555214	TMB Substrate Reagent Set	each	(none)	
353279	Purified Mouse Anti- 96-well Flat-bottom ELISA Plates	each	(none)	

## **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References

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Renauld JC. Oppenheim JJ, Feldman M, Durum SK, et al, ed. Cytokine reference: a compendium of cytokines and other mediators of host defense. San Diego: Academic Press; 2001:155-164.(Biology)

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