

## Technical Data Sheet

## Purified Mouse Anti-Human CD121a

## Product Information

<b>Material Number:</b>	<b>551388</b>
<b>Alternate Name:</b>	IL-1 Receptor Type 1
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	hIL1R-M1
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The HIL1R-M1 antibody reacts with recombinant and natural soluble CD121a which is also known as human IL-1 receptor type I proteins. Human IL-1 receptor type I serves as the ligand-binding chain of the IL-1 heterodimer complex. When produced by proteolytic cleavage, soluble forms of the IL-1R type I are found the circulation of healthy individuals and in excessive levels during inflammatory diseases. The human IL-1 receptor type I is also expressed predominantly by T lymphocytes, fibroblasts, and endothelial cells.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4°C.

## Application Notes

## Application

ELISA	Routinely Tested
Western blot	Reported

## Recommended Assay Procedure:

**ELISA Capture:** The purified HIL1R-M1 antibody (Cat. No. 551388) is useful as a capture antibody for a sandwich ELISA for measuring human IL-1 receptor I protein levels. Purified HIL1R-M1 antibody can be paired with a biotinylated detecting antibody, with recombinant soluble human IL-1 receptor type I as the standard. Purified HIL1R-M1 antibody should be titrated between 1 - 4  $\mu\text{g/ml}$  to determine its optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of recombinant human IL-1 receptor type I ranging from 3000 to 20  $\text{pg/ml}$  are recommended for inclusion in each ELISA plate. For specific methodology, please visit the protocols section or chapter on ELISA in the Immune Function Handbook, both of which are posted on our web site, [www.bdbiosciences.com](http://www.bdbiosciences.com).

Note: This ELISA antibody pair shows no cross-reactivity with the following recombinant human cytokines: sCD14, CD40, CD40L, IL-1Ra, IL-1RII, IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, sIL-4R, IL-5, IL-6, IL-6R, IL-7, IL-8, IL-10, IL-12p40, IL-12p70, IL-13, IL-15, TNF, LT- $\alpha$ , sTNFRI, sTNFRII, IFN $\gamma$ , TRAIL, GM-CSF, TGF $\beta$ , Trx

**Western Blot:** The purified HIL1R-M1.1 antibody (Cat. No. 551388) has been reported to be useful for Western blotting; however, the antibody is not routinely tested for this application at BD Biosciences.

## Product Notices

1. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. 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

Bernstein SH, Fay J, Frankel S, et al. A phase I study of recombinant human soluble interleukin-1 receptor (rhu IL-1R) in patients with relapsed and refractory acute myeloid leukemia. *Cancer Chemother Pharmacol.* 1999; 43(2):141-144.(Biology)  
 Born TL, Smith DE, Garka KE, Renshaw BR, Bertles JS, Sims JE. Identification and characterization of two members of a novel class of the interleukin-1 receptor (IL-1R) family. Delineation of a new class of IL-1R-related proteins based on signaling. *J Biol Chem.* 2000; 275(39):29946-29954.(Biology)

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