

Technical Data Sheet

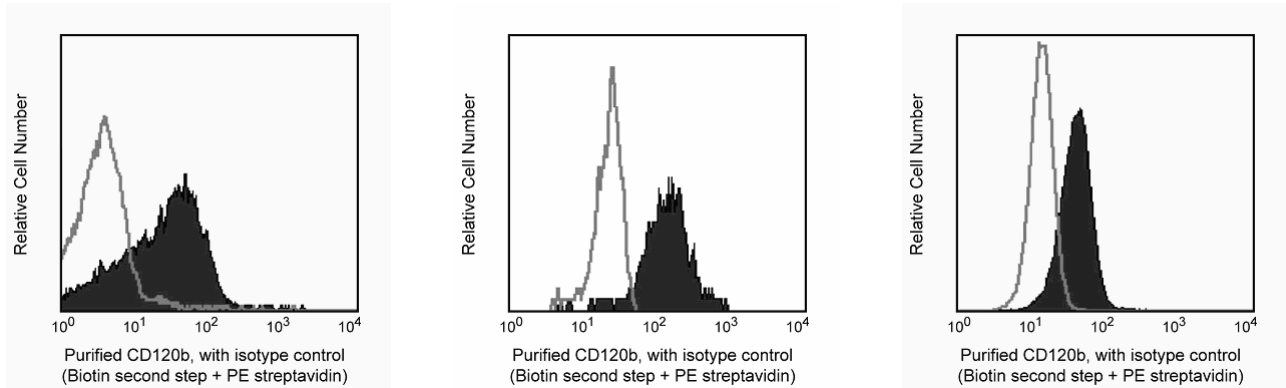
Purified Rat Anti-Human CD120b

Product Information

Material Number:	551311
Alternate Name:	TNF Receptor Type II
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	hTNFR-M1
Immunogen:	COS-expressed recombinant human TNFRII
Isotype:	Rat IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The hTNFR-M1 antibody reacts with the extracellular domain of the 75 kDa transmembrane receptor for the human cytokines, tumor necrosis factor (TNF or TNF-α) and lymphotoxin-alpha (LT-α3, aka, lymphotoxin or TNF-β). This receptor is referred to as the p75 or Type II Tumor Necrosis Factor Receptor (TNFRII) [aka, CD120b]. Human TNFRII proteins are expressed by hematopoietic cells including macrophages, neutrophils, lymphocytes, thymocytes and mast cells. TNFRII is expressed by a variety of other cell types including endothelial cells, cardiac myocytes and prostate cells. Naive B cells express very low or undetectable levels of TNFRII whereas mature erythrocytes and platelets are uniformly negative for TNFRII expression. The immunogen used to generate the hTNFR-M1 hybridoma was COS- expressed recombinant human TNFRII.



Expression of cell surface TNFRII by whole-lysed human blood. Whole human blood was lysed with PharmLyse™ (Cat. No. 555899) prior to staining with hTNFR-M1. Whole lysed human blood was subsequently blocked with normal polyclonal human IgG and stained with purified hTNFR-M1 (0.06 µg/10e6 cells, Cat No. 551311) followed by biotinylated goat anti-rat F(ab')₂ IgG and streptavidin phycoerythrin (0.015 µg, Cat. No. 554061). Staining with the hTNFR-M1 antibody (filled histograms) is compared to staining obtained using the isotype control antibody (open histograms). The histograms in the figure were derived from gated events with the light scattering characteristics of viable lymphocytes (left panel), monocytes (center panel) and granulocytes (right panel). Note: Certain human cell lines or cell types (e.g., neutrophils, monocytes) can first be treated with reagents that block receptors for the Fc regions of immunoglobulin to avoid nonspecific immunofluorescent staining mediated by Fc receptors.

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

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

Immunofluorescent Staining and Flow Cytometric Analysis: The purified hTNFR-M1 (Cat. No. 551311) antibody can be used for the immunofluorescent staining (≤ 1 µg antibody/10e6 cells) and flow cytometric analysis of human nucleated cells to measure their expressed levels of surface TNFRII. An appropriate immunoglobulin isotype control is clone R35-38 (Cat. No. 555846). A three-layer staining protocol is recommended for maximizing the detection of TNFRII expressed by cells as detailed in the figure legend. Please note also that as a consequence of

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in vivo or in vitro activation, cell surface TNFRII can either be shed by cells or transiently expressed at higher levels. As a result, cellular activation can affect the cell's overall expressed level of surface TNFRII.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555846	Purified Rat IgG2b, κ Isotype Control	0.1 mg	R35-38
555899	Lysing Buffer	100 ml	(none)
554061	PE Streptavidin	0.5 mg	(none)
554014	Biotin Goat Anti-Rat Specific Polyclonal Antibody	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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

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