

Technical Data Sheet

Purified Rat Anti-Mouse CD253

Product Information

Material Number:	550320
Alternate Name:	TRAIL, APO-2L, Ly-81, TL2
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	N2B2
Immunogen:	Mouse Trail-transfected 2PK-3 cells
Isotype:	Rat (F344) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The N2B2 antibody reacts with mouse TRAIL (TNF-Related Apoptosis-Inducing Ligand, also known as APO-2 ligand or Ly-81), a 40-kDa type-II transmembrane protein of the TNF family. This antibody recognizes mouse *Trail*-transfected 2PK-3 cells, but not the parental cell line. TRAIL selectively induces apoptosis in various transformed cells, but not in normal cells. Five receptors have been identified for human TRAIL, whereas only one receptor has been described for the mouse counterpart thus far. The pattern of expression of mouse TRAIL is controversial. TRAIL has been detected, with a rabbit polyclonal antibody, on the surface of activated CD4+ and CD8+ T lymphocytes, as well as on CD45R/B220+ lymphocytes, and transformed T- and B-cell lines. Similar results were obtained by western blot and mRNA analyses. However, these results could not be reproduced with the N2B2 mAb. TRAIL expression, detected with the N2B2 mAb, is induced on CD3- NK1.1+ cells after stimulation with IL-2 or IL-15. However, neither freshly isolated nor activated T cells showed TRAIL expression on the cell surface. Furthermore, TRAIL mediates NK-cell cytotoxicity, which is blocked by the N2B2 mAb. TRAIL has been renamed as CD253 recently.

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
Western blot	Reported

Recommended Assay Procedure:

Since this antigen is expressed at low density on lymphoid cell surfaces, it may be desirable to amplify staining by using a biotinylated second-step antibody, such as goat anti-rat Ig polyclonal antibody (Cat. No. 554014), followed by a “bright” third-step reagent, such as Streptavidin-PE (Cat. No. 554061) or Streptavidin-APC (Cat. No. 554067). In order to obtain bright staining on LAK (Lymphokine-activated killer) cells, we suggested the use of A-LAK cells (adherent-LAK cells) that have been activated with 3,000 U/ml of recombinant mouse IL-2 (Cat. No. 550069) or human IL-2 (Cat. No. 554603). Other reported applications include western blot analysis and blocking of IL-2/IL-15-activated NK-cell cytotoxicity against mouse fibrosarcoma L929 target cells.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554014	Biotin Goat Anti-Rat Ig	0.5 mg	Polyclonal
554061	PE Streptavidin	0.5 mg	(none)
550069	Recombinant mouse IL-2	20 μ g	(none)
554067	APC Streptavidin	0.1 mg	(none)
554603	Recombinant Human IL-2	5 μ g	(none)

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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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