Technical Data Sheet

# Purified Mouse Anti-Human CD27

## Product Information

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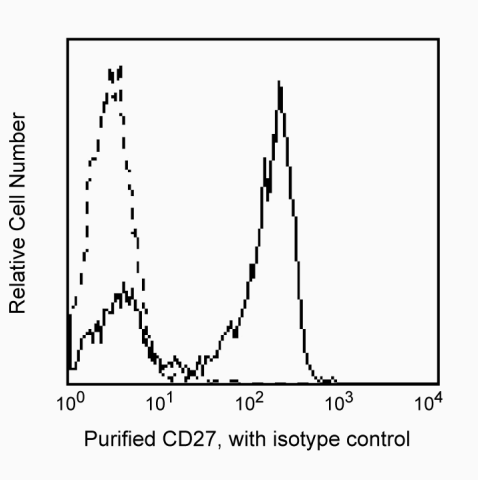
| **Material Number:** | **555439** |
| **Alternate Name:** | TNFRSF7; TNF receptor superfamily, member 7; T14; Tp55; S152 |
| **Size:** | 0.1 mg |
| **Concentration:** | 0.5 mg/ml |
| **Clone:** | M-T271 |
| **Immunogen:** | Human T-CLL cells |
| **Isotype:** | Mouse (BALB/c) IgG1, κ |
| **Reactivity:** | QC Testing: Human<br>Tested in Development: Rhesus, Cynomolgus, Baboon |
| **Workshop:** | IV T187; V 5T CD27.03 |
| **Storage Buffer:** | Aqueous buffered solution containing ≤0.09% sodium azide. |

## Description

The M-T271 monoclonal antibody specifically binds to CD27. CD27 presents as a type I transmembrane, disulphide-linked 110 kDa homodimer comprised of two polypeptide chains. The CD27 molecule is a lymphocyte-specific member of the TNF/NGF-R family, and is expressed on a subset of human thymocytes and on the majority of mature T lymphocytes, activated B cells and NK cells. CD27 is highly induced on T cells after TCR stimulation. CD27 binds to CD70 (also known as, CD27 ligand or CD27L) and may be involved in cellular interaction of T and B lymphocytes.




***Flow cytometric analysis of CD27 on human peripheral blood lymphocytes.*** *Whole blood was stained with either Purified Mouse IgG1, κ Isotype Control (Cat. No. 555746; dashed line histogram) or Purified Mouse Anti-Human CD27 (Cat. No. 555430; solid line histogram), then FITC Goat Anti-Mouse IgG/IgM (Cat. No. 555988). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Fluorescence histograms depicting CD27 (or Ig isotype control) expression were derived from gated events with the side and forward light-scattering characteristics of viable lymphocytes.*

## Preparation and Storage

Store undiluted at 4°C.

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

## Application Notes

**Application**

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| Flow cytometry | Routinely Tested |
| Immunohistochemistry-frozen | Tested During Development |
| Immunohistochemistry-formalin (antigen retrieval required) | Tested During Development |

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## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 555988 | FITC Goat Anti-Mouse IgG/IgM | 0.5 mg | Polyclonal |
| 555746 | Purified Mouse IgG1, κ Isotype Control | 0.1 mg | MOPC-21 |
| 554656 | Stain Buffer (FBS) | 500 mL | (none) |
| 554657 | Stain Buffer (BSA) | 500 mL | (none) |
| 349202 | BD FACS™ Lysing Solution | 100 mL | (none) |
| 555899 | Lysing Buffer | 100 mL | (none) |

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
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.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
5. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

## References


Bigler RD, Bushkin Y, Chiorazzi N. S152 (CD27). A modulating disulfide-linked T cell activation antigen. *J Immunol.* 1988; 141(1):21-28. (Biology)

Bigler RD, Donat TL, Boselli CM. Definition of three epitopes of the CD27 molecule [P 120->55] present on activated normal lymphocytes. In: Knapp W. W. Knapp .. et al., ed. *Leucocyte typing IV : white cell differentiation antigens.* Oxford New York: Oxford University Press; 1989:351-352. (Biology)

Schlossman SF. Stuart F. Schlossman .. et al., ed. *Leucocyte typing V : white cell differentiation antigens : proceedings of the fifth international workshop and conference held in Boston, USA, 3-7 November, 1993.* Oxford: Oxford University Press; 1995(Clone-specific)