Technical Data Sheet

# Purified NA/LE Hamster Anti-Mouse CD178

## Product Information

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| **Material Number:** | **555290** |
| **Alternate Name:** | Fas Ligand, CD95 Ligand |
| **Size:** | 0.5 mg |
| **Concentration:** | 1.0 mg/ml |
| **Clone:** | MFL3 |
| **Immunogen:** | Mouse FasL-transfected cells |
| **Isotype:** | Armenian Hamster IgG1, κ |
| **Reactivity:** | QC Testing: Mouse |
| **Storage Buffer:** | No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2μm sterile filtered. Endotoxin level is ≤0.01 EU/μg (≤0.001 ng/μg) of protein as determined by the LAL assay. |

## Description

The MFL3 antibody reacts with CD178 (Fas Ligand, CD95 Ligand) on all strains tested. In the mouse, Fas Ligand is expressed on activated T cell lines and in spleen, testis, and eye. FasL mRNA has been demonstrated at various levels in bone marrow, thymus, spleen, lymph node, lung, small intestine, testis, and uterus. Moreover, T-cell activators, but not B-cell activators, enhanced the expression of FasL mRNA in splenocytes; and FasL mRNA was restricted to the T-cell lineage among a panel of cell lines from lymphoid tissues. Fas Ligand is not functional in mice homozygous for the gld (generalized lympho-proliferative disease) mutation; these mice cannot limit the expansion of activated lymphocytes and develop autoimmune disease. Fas Ligand is a member of the TNF/NGF family, which binds to CD95 (Fas), inducing apoptotic cell death. This Fas/Fas Ligand interaction is believed to participate in T-cell development, the regulation of immune responses, and cell-mediated cytotoxic mechanisms. There is mounting evidence that Fas Ligand is also proinflammatory, mediating neutrophil extravasation and chemotaxis. Fas Ligand is released from the surface of transfectant cells by metalloproteinases, and the soluble Fas Ligand may block the activities of the membrane-bound molecule. The MFL3 mAb has been reported to efficiently inhibit the cytotoxicity of mouse Fas Ligand-transfected cells against human Fas-transfected cells. This hamster mAb to a mouse leukocyte antigen does not cross-react with rat leukocytes.

## Preparation and Storage

Store undiluted at 4°C.

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

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

## Application Notes

**Application**

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| Flow cytometry | Routinely Tested |
| Blocking | Reported |

**Recommended Assay Procedure:**

Enriched splenic T cells can be induced to express Fas Ligand by 6-8-hour culture with plate-bound anti-mouse CD3 mAb 17A2 (Cat. No. 555273), mAb 145-2C11 (Cat. No. 557306), or mAb 500A2 (Cat. No. 553238). Because Fas Ligand is expressed at low density on activated cells, it may be desirable to amplify staining by using a biotinylated second-step antibody with a "bright" third-step reagent, such as PE Streptavidin (Cat. No. 554061). The BD Biosciences anti-hamster IgG mAb cocktails, either biotin- or PE-conjugated (Cat. No. 554010 or 554056, respectively) are not effective for staining with mAb MFL3. Other reported applications include blocking of the cytotoxic activities of the mouse FasLigand-transfected L5178Y T lymphoma and influenza-specific CD8+ BALB/c CTL clones.

## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 555273 | Purified Rat Anti-Mouse CD3 Molecular Complex | 0.5 mg | 17A2 |
| 557306 | Purified Hamster Anti-Mouse CD3e | 0.1 mg | 145-2C11 |
| 553238 | Purified Hamster Anti-Mouse CD3e | 0.5 mg | 500A2 |
| 554061 | PE Streptavidin | 0.5 mg | (none) |
| 554010 | Biotin Mouse Anti-Armenian and Syrian Hamster IgG Cocktail | 0.5 mg | (none) |

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

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2. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/pharmingen/hamster_chart_11x17.pdf.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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