**DESCRIPTION**

**Source**
Mouse myeloma cell line, NS0-derived
Pro132-Leu279, with an N-terminal Met and 6-His tag
Accession # Q544E9

**N-terminal Sequence Analysis**
Met

**Predicted Molecular Mass**
18 kDa (monomer)

**SPECIFICATIONS**

**SDS-PAGE**
27-33 kDa, reducing conditions

**Activity**
Measured by its ability to induce apoptosis of Jurkat human acute T cell leukemia cells.
The ED50 for this effect is 0.25-1.5 µg/mL in the presence of 10 µg/mL of a cross-linking antibody Mouse Anti-polyHistidine Monoclonal Antibody (Catalog # MAB050).

This soluble Recombinant Mouse Fas Ligand/TNFSF6 has weak cytotoxic activity. It has no effects on A20 mouse B cell lymphoma cells which express mouse Fas.
This is one of multiple forms available for this protein. Check R&D Systems' website, www.RnDSystems.com, for a complete listing of the products.

**Endotoxin Level**
<0.10 EU per 1 µg of the protein by the LAL method.

**Purity**
>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

**Formulation**
Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution**
Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

**Shipping**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage**
- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
  - 6 months from date of receipt, -20 to -70 °C as supplied.
  - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
  - 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Fas ligand (FasL) is a 40 kDa type II membrane protein belonging to the TNF family. In the new TNF super family nomenclature, FasL is referred to as TNFSF6. The specific receptor for FasL is Fas (CD95, Apo-1), a 45 kDa type I transmembrane protein that is a member of the TNF receptor family. FasL is predominantly expressed on activated T cells and NK cells, while Fas is expressed on various types of cells. The Fas/FasL system plays a crucial role in modulating immune response by inducing cell apoptosis to maintain homeostasis, self-tolerance of lymphocytes, and immune privilege. FasL was reported to be a potent chemoattractant for neutrophils, suggesting a novel proinflammatory function of this molecule. Like other members of the TNF family, the membrane-bound FasL can be cleaved by metalloproteinase to generate the soluble Fas ligand (sFasL) which is mainly a non-covalently linked homotrimer. It has been shown that the membrane-bound TNF-α and FasL are primary activators of their receptors. In contrast to soluble TNF-α which has potent cytotoxicity, sFasL is much less cytotoxic. Studies have shown that sFasL may competitively inhibit the killing effect of membrane FasL indicating that the cleaving of membrane FasL might be a mechanism to down-regulate their activities.

**References:**