

# PRODUCT INFORMATION



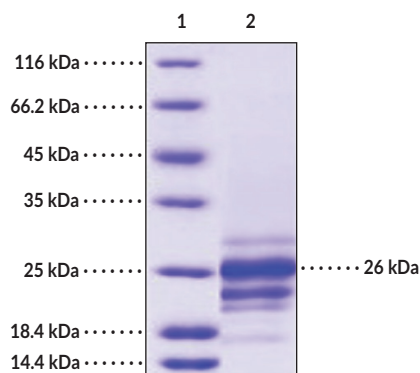
**Soluble Fas Ligand/CD95 Ligand (human, recombinant; aa 134-281)**  
Item No. 40212

## Overview and Properties

**Synonyms:** CD178, CD95L, FasL, FASLG, TNFL6, TNF Ligand Superfamily Member 6, TNFSF6  
**Source:** Active recombinant human N-terminal His-tagged FasL expressed in yeast  
**Amino Acids:** 134-281  
**Uniprot No.:** P48023  
**Molecular Weight:** 19.3 kDa  
**Storage:** -80°C (as supplied)  
**Stability:** ≥1 year  
**Purity:** ≥90% estimated by SDS-PAGE  
**Supplied in:** Lyophilized from sterile PBS, pH 7.4  
**Protein**  
**Concentration:** *batch specific* mg/ml  
**Activity:** See figures for details

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Images



Lane 1: MW Markers  
Lane 2: Soluble Fas Ligand/CD95 Ligand

**SDS-PAGE Analysis of Soluble Fas Ligand/CD95 Ligand.** This protein has a calculated molecular weight of 19.3 kDa. It has an apparent molecular mass of approximately 26 kDa, by SDS-PAGE, under reducing conditions due to glycosylation.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

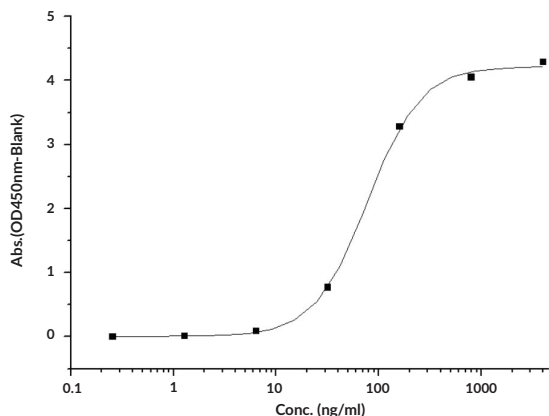
**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
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Immobilized Human Fas/CD95 hFc at 2 µg/ml (100 µl/well) can bind Soluble Fas Ligand/CD95 Ligand (human, recombinant; aa 134-281), the EC<sub>50</sub> of Soluble Fas Ligand/CD95 Ligand (human, recombinant; aa 134-281) is 40-200 ng/ml.

## Description

Fas ligand (FasL), also known as CD95L, is a type II transmembrane protein and member of the TNF superfamily.<sup>1</sup> It is composed of a cytoplasmic domain, transmembrane domain, stalk region, TNF homology domain (THD), which is involved in homotrimerization, and Fas-binding domain. FasL is expressed in activated T cells, as well as the placenta, testis, lung, prostate, esophagus, uterus and spleen.<sup>2</sup> Binding of FasL to its receptor Fas leads to formation of a death-inducing signaling complex (DISC) composed of CD95 oligomers, the Fas-associated death domain protein (FADD), and procaspase-8, procaspase-10, and cellular FLICE-like inhibitory protein (c-FLIP), which induces apoptosis.<sup>3</sup> Soluble FasL (sFasL) is produced by proteolytic cleavage of FasL by various matrix metalloproteinases (MMPs) and either inhibits FasL-induced apoptosis or induces apoptosis in a context-dependent manner.<sup>1,4</sup> sFasL induces migration of isolated human neutrophils and apoptosis in primary human distal lung epithelial cells.<sup>5,6</sup> It decreases ankylosis in a rat model of collagen-induced arthritis.<sup>7</sup> Serum levels of sFasL are increased in patients with insulin-dependent diabetes mellitus, systemic lupus erythematosus (SLE), rheumatoid arthritis, gastric cancer, or leukemia. Cayman's Soluble Fas Ligand/CD95 Ligand (human, recombinant; aa 134-281) protein can be used for binding assays. This protein consists of 168 amino acids and has a calculated molecular weight of 19.3 kDa. By SDS-PAGE, under reducing conditions, the apparent molecular mass of the protein is 26 kDa due to glycosylation.

## References

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7. Li, N.-L., Nie, H., Yu, Q.-W., *et al.* Role of soluble Fas ligand in autoimmune diseases. *World J. Gastroenterol.* **10(21)**, 3151-3156 (2004).

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