# Cynomolgus / Rhesus macaque Fas Ligand / TNFSF6 Protein, His Tag, premium grade

Catalog # FAL-H5246



#### Source

Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade(FAL-H5246) is expressed from human 293 cells (HEK293). It contains AA Pro 133 - Leu 280 (Accession # P63308-1).

Predicted N-terminus: His

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

### **Molecular Characterization**

Poly-his

Fas Ligand(Pro 133 - Leu 280) P63308-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 18.8 kDa. The protein migrates as 27-33 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

# **Sterility**

Negative

# Mycoplasma

Negative.

# **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

# Storage

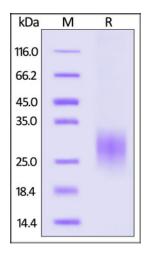
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

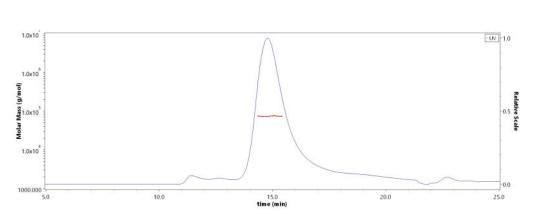
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

# **SEC-MALS**



The purity of Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade (Cat. No. FAL-H5246) is more than 95% and the molecular weight of this protein is around 65-80 kDa verified by SEC-MALS.

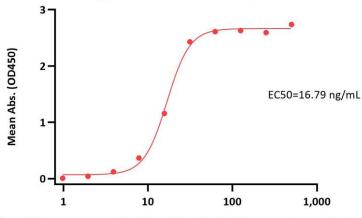
Report





# **Bioactivity-ELISA**

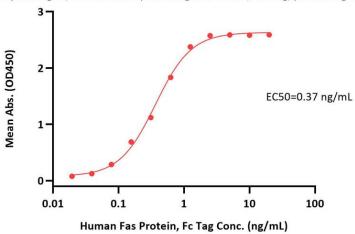
Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade ELISA 0.5  $\mu$ g of Human Fas Protein, Fc Tag per well



Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade Conc. (ng/mL)

Immobilized Human Fas Protein, Fc Tag (Cat. No. FAS-H5252) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade (Cat. No. FAL-H5246) with a linear range of 1-31 ng/mL (QC tested).

Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade ELISA 0.2  $\mu$ g of Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade per well



Immobilized Cynomolgus / Rhesus macaque Fas Ligand Protein, His Tag, premium grade (Cat. No. FAL-H5246) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human Fas Protein, Fc Tag (Cat. No. FAS-H5252) with a linear range of 0.1-1 ng/mL (Routinely tested).

# Background

Fas ligand is also known as FasL, CD178, CD95L, or TNFSF6, is a homotrimeric type-II transmembrane protein that belongs to the tumor necrosis factor (TNF) family. Its binding with its receptor induces apoptosis. Fas ligand/receptor interactions play an important role in the regulation of the immune system and the progression of cancer. Mature human Fas Ligand consists of a 179 amino acid (aa) extracellular domain (ECD), a 22 aa transmembrane segment, and a 80 aa cytoplasmic domain. Within the ECD, human Fas Ligand shares 81% and 78% aa sequence identity with mouse and rat Fas Ligand, respectively. Apoptosis triggered by Fas-Fas ligand binding plays a fundamental role in the regulation of the immune system. Its functions include:T-cell homeostasis, cytotoxic T-cell activity, immune privilege, maternal tolerance, tumor counterattack. Defective Fas-mediated apoptosis may lead to oncogenesis as well as drug resistance in existing tumors. Germline mutation of Fas is associated with autoimmune lymphoproliferative syndrome (ALPS), a childhood disorder of apoptosis.

# **Clinical and Translational Updates**

