

APA031Mu62 100µg
Active Factor Related Apoptosis Ligand (FASL)
Organism Species: *Mus musculus (Mouse)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: Pro132~Leu279

Tags: N-terminal His-tag

Purity: >80%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 5% Trehalose .

Original Concentration: 200µg/mL

Applications: Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.9

Predicted Molecular Mass: 18.5kDa

Accurate Molecular Mass: 22-33kDa as determined by SDS-PAGE reducing conditions.

Phenomenon explanation:

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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PSTPSEKKEPRSV AHLTG NPHSR SIPLEWEDTYGTALISGVKYYKGGGLVINETGLYFVYSKVYFRGQSC  
NNQPLNHHKVVYMRNSKYPEDLVLMEEKRLNYCTTGQIWAHSSYLGA VFNLT SADHLYVNI SQLSLIN FEE  
SKTFFGLYKL
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[ACTIVITY]

Fas ligand (FASL) is a 40 kDa type II membrane protein belonging to the TNF family, referred to as TNFSF6 in the new TNF superfamily nomenclature. Its specific receptor is FAS (CD95, Apo-1), a 45 kDa type I transmembrane protein of the TNF receptor family. FASL is mainly expressed on activated T cells and NK cells, while FAS is present on various cell types. The FAS/FASL system is crucial for regulating immune responses by inducing cell apoptosis, thereby maintaining homeostasis, lymphocyte self-tolerance, and immune privilege. FASL has also been reported as a potent neutrophil chemoattractant, indicating a new proinflammatory function. Additionally, a functional binding ELISA assay was used to detect the interaction between recombinant mouse FASL and recombinant human FAS. biotin-linked FASL were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to FAS-coated microtiter

wells and incubated for 1h at 37 °C . Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 °C . Finally, add 50µl stop solution to the wells and read at 450nm immediately. The binding activity of FASL and FAS was shown in Figure 1, the EC50 for this effect is 0.46µg/mL.

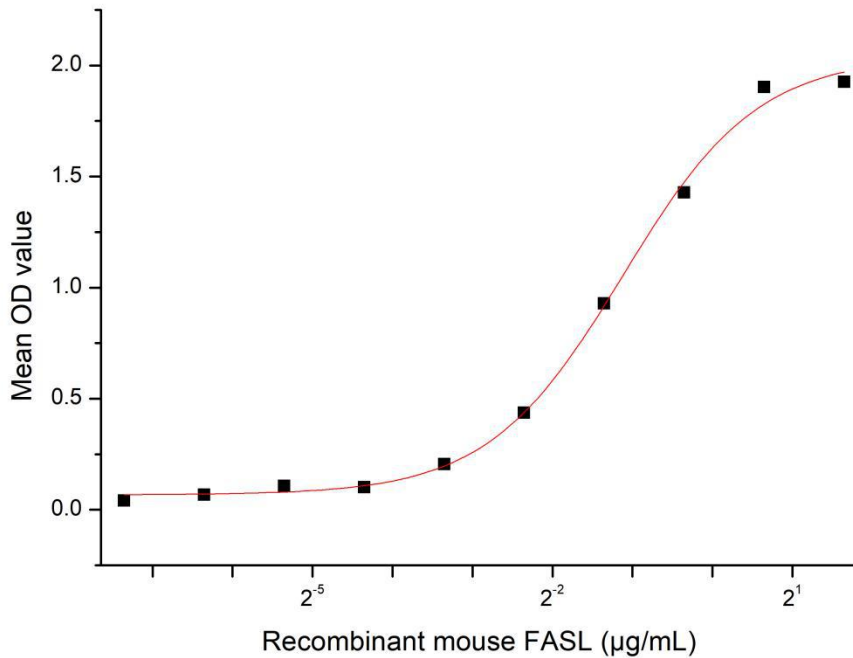


Figure 1. The binding activity of recombinant mouse FASL and recombinant human FAS

[IDENTIFICATION]

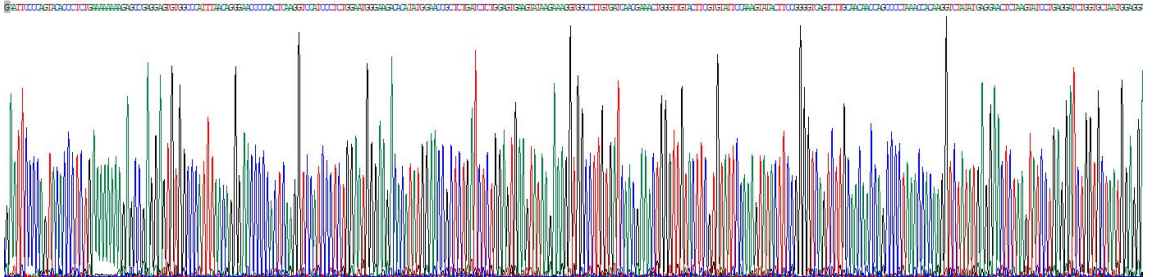


Figure 2. Gene Sequencing (extract)

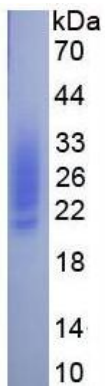


Figure 3. SDS-PAGE

Sample: Active recombinant FASL, Mouse

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.