Product: Human Tumor Necrosis Factor Related Apoptosis Inducing Ligand (TRAIL) ELISA Kit

Catalog NO.: NST-27006

Assay Type: **Sandwich**

Research Area: Apoptosis

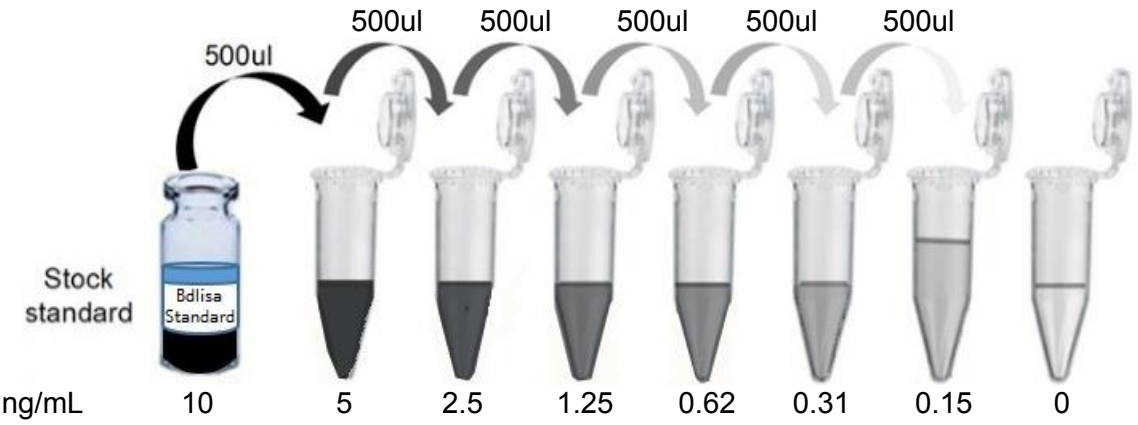
Synonyms: CD253; TNFSF10; APO2L; Apo2-L; TL2; TRAIL; Tumor Necrosis Factor Ligand Superfamily Member 10; Apo-2 Ligand

Detection Range: 0.15 -10ng/mL

Sensitivity: 0.06 ng/mL

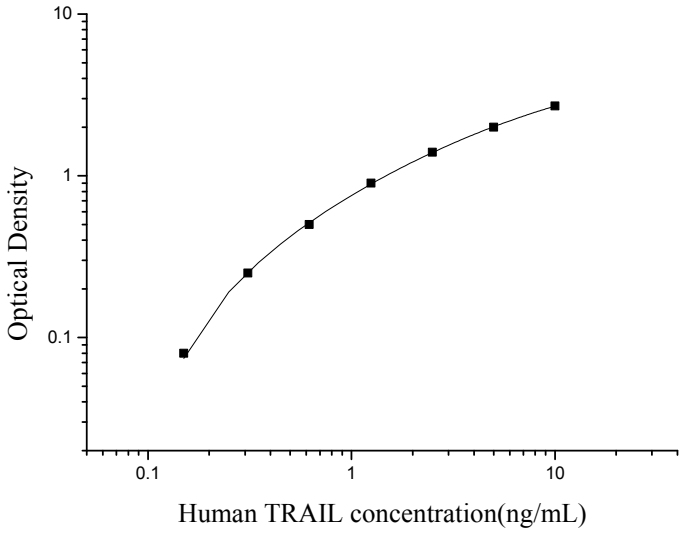
Standard Preparation

Reconstitute the **Standard** with 1.0 mL of **Universal Diluent**, keep for 10 minutes at room temperature, shake gently(not to foam). The concentration of the standard in the stock solution is 10 ng/mL. Please prepare 7 tubes containing 0.5 mL **Universal Diluent** and produce a double dilution series according to the picture shown below. Mix each tube thoroughly before the next transfer. Set up 7 points of diluted standard such as 10 ng/mL, 5 ng/mL, 2.5 ng/mL, 1.25 ng/mL, 0.62 ng/mL, 0.31 ng/mL, 0.15 ng/mL, and the last EP tube with **Universal Diluent** is the blank as 0 ng/mL.



Typical Data

As the OD values of the standard curve may vary according to the conditions of the objective assay, the experimenter should fit a standard curve for each test. Typical standard curve provided below is for reference only.



Specificity

This assay has high sensitivity and excellent specificity for detection of Human TRAIL. No significant cross-reactivity or interference between Human TRAIL and analogues is observed.

Note: Limited by current skills and knowledge, it is impossible for us to complete the cross-reactivity detection between Human TRAIL and all the analogues, therefore, cross reaction may still exist.

Recovery

Matrices listed below were spiked with certain level of recombinant Human TRAIL and the recovery rates were calculated by comparing the measured value to the expected amount of Human TRAIL in samples.

Matrix	Recovery range(%)	Average(%)
Serum(n=10)	80-106	93
EDTA plasma(n=10)	82-96	89
Heparin plasma(n=10)	83-101	92

Linearity

The linearity of the kit was assayed by testing samples spiked with appropriate concentration of Human TRAIL and their serial dilutions. The results were demonstrated by the percentage of calculated concentration to the expected.

Sample	1:2	1:4	1:8	1:16
Serum(n=10)	83-99%	89-101%	83-96%	79-107%

EDTA plasma(n=10)	92-104%	88-99%	74-91%	70-94%
Heparin plasma(n=10)	85-103%	81-102%	83-92%	80-92%

Precision

Intra-assay Precision (Precision within an assay): Three samples with low, middle and high level Human TRAIL were tested 20 times on one plate, respectively.

Inter-assay Precision (Precision between assays): Three samples with low, middle and high level Human TRAIL were tested on 3 different plates, 8 replicates in each plate.

CV (%) = SD/meanX100

Intra-Assay: CV< 10%

Inter-Assay: CV< 12%

Stability

The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 10% within the expiration date under appropriate storage condition.

Main components	37℃ for 7 days	-20℃ for 12 months
Average(%)	90	95-100

To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is strongly suggested that the same operator performs the whole assay from the beginning to the end.