abcam

Product datasheet

Human FAS ELISA Kit ab183360

יילצעבע SimpleStep ELISA

画像数8

製品の概要

製品名

Human FAS ELISA Kit

検出方法

Colorimetric

再現性

Intra-Assay(同時再現性)

| サンプル | N | 平均值 | SD | CV% |
|-------|---|-----|----|------|
| Media | 8 | | | 3.8% |

Inter-Assay(日差再現性)

| サンプル | N | 平均値 | SD | CV% |
|-------|---|-----|----|------|
| Media | 3 | | | 9.5% |

サンプルの種類

アッセイタイプ

検出感度

検出範囲

添加回収試験

Cell culture supernatant, Serum, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma

Sandwich (quantitative)

26 pg/ml

46.88 pg/ml - 3000 pg/ml

特定サンプルでの回収試験

| サンプルの種類 | 平均 % | 測定範囲 |
|--------------------------|------|------------|
| Cell culture supernatant | 97 | 91% - 108% |
| Serum | 97 | 88% - 107% |
| Cell culture media | 100 | 94% - 105% |
| Hep Plasma | 105 | 98% - 111% |
| EDTA Plasma | 92 | 81% - 102% |
| Cit plasma | 98 | 90% - 105% |

全工程の試験時間

1h 30m

ステップ

One step assay

種交差性

交差種: Human

製品の概要

As of October 15, 2019, Human FAS ELISA kit has been re-developed. We have identified new recombinant monoclonal antibodies to provide improved performance and consistency.

Human FAS ELISA kit (ab183360) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of FAS protein in human cell culture supernatant, serum, and plasma samples. It uses our proprietary SimpleStep ELISA® technology. Quantitate human FAS with 2 pg/mL sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- -Single-wash protocol reduces assay time to 90 minutes or less
- -High sensitivity, specificity and reproducibility from superior antibodies
- -Fully validated in biological samples
- -96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpeStep ELISA® kits.

特記事項

FAS is a plasma membrane receptor for FASLG ligand (TNFSF6/FASLG). Upon ligand binding, the FASLG Receptor is activated and the adapter molecule FADD recruits caspase-8 to the activated receptor. The resulting death-inducing signaling complex (DISC) performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases) activation mediating apoptosis. FASLG-mediated apoptosis may have a role in the induction of peripheral tolerance, in the antigen-stimulated suicide of mature T-cells, or both. The secreted isoforms 2 to 6 of the FASLG Receptor block apoptosis as they sequester the Fas ligand.

This kit uses a recombinant protein fragment corresponding to the extracellular portion (amino acid 17-172) of the full length Human Fas Receptor protein as standard sample.

試験プラットフォーム

Microplate

製品の特性

保存方法

Store at +4°C. Please refer to protocols.

| 内容 | 1 x 96 tests |
|---------------------------------|--------------|
| 10X Human FAS Capture Antibody | 1 x 600µl |
| 10X Human FAS Detector Antibody | 1 x 600µl |

| 内容 | 1 x 96 tests |
|---|--------------|
| 10X Wash Buffer PT (ab206977) | 1 x 20ml |
| Antibody Diluent CPI - HAMA Blocker (ab193969) | 1 x 6ml |
| Human FAS Lyophilized Recombinant Protein | 2 vials |
| Plate Seals | 1 unit |
| Sample Diluent NS (ab193972) | 1 x 50ml |
| SimpleStep Pre-Coated 96-Well Microplate (ab206978) | 1 unit |
| Stop Solution | 1 x 12ml |
| TMB Development Solution | 1 x 12ml |

機能

Receptor for TNFSF6/FASLG. The adapter molecule FADD recruits caspase-8 to the activated receptor. The resulting death-inducing signaling complex (DISC) performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases) mediating apoptosis. FAS-mediated apoptosis may have a role in the induction of peripheral tolerance, in the antigen-stimulated suicide of mature T-cells, or both. The secreted isoforms 2 to 6 block apoptosis (in vitro).

組織特異性

lsoform 1 and isoform 6 are expressed at equal levels in resting peripheral blood mononuclear cells. After activation there is an increase in isoform 1 and decrease in the levels of isoform 6.

関連疾患

Defects in FAS are the cause of autoimmune lymphoproliferative syndrome type 1A (ALPS1A) [MIM:601859]; also known as Canale-Smith syndrome (CSS). ALPS is a childhood syndrome involving hemolytic anemia and thrombocytopenia with massive lymphadenopathy and splenomegaly.

配列類似性

Contains 1 death domain.
Contains 3 TNFR-Cys repeats.

ドメイン

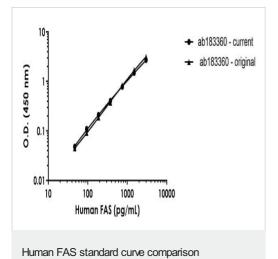
Contains a death domain involved in the binding of FADD, and maybe to other cytosolic adapter

proteins.

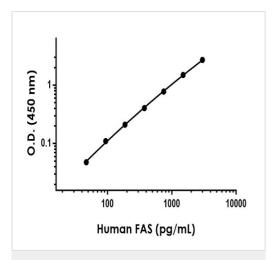
細胞内局在

Secreted and Cell membrane.

画像

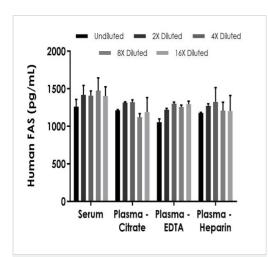


Standard Curve comparison between the original Human FAS SimpleStep ELISA kit and current Human FAS SimpleStep ELISA kit.



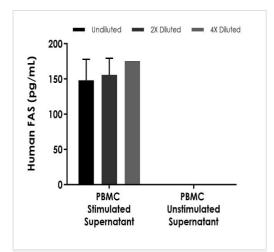
Example of human FAS standard curve in Sample Diluent NS.

The FAS standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



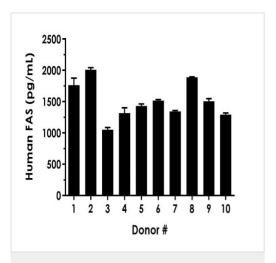
Interpolated concentrations of native FAS in human serum and plasma samples.

The concentrations of FAS were measured in duplicates, interpolated from the FAS standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate, EDTA, heparin) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FAS concentration was determined to be 1,393 pg/mL in neat serum, 1,231 pg/mL in neat plasma (citrate) and 1,226 pg/mL in neat plasma (EDTA) and 1,237pg/mL in neat plasma (heparin).



Interpolated concentrations of native FAS in human PBMC cell culture supernatant derived from cells seeded at 107 cells/mL and cultured in the presence or absence of 1.5% PHA for 36 hours.

The concentrations of FAS were measured in duplicate and interpolated from the FAS standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FAS concentration was determined to be 157 pg/mL in neat stimulated PBMC cell culture supernatant and undetectable in unstimulated PBMC cell culture supernatant.



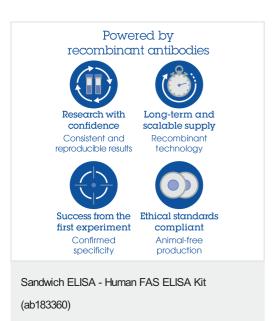
Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FAS concentration was determined to be 1,513 pg/mL with a range of 1,050 – 2,009 pg/mL.

Serum from ten individual healthy human male donors was measured in duplicate.

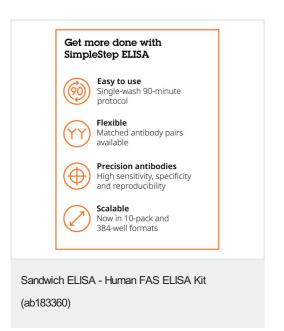


Sandwich ELISA - Human FAS ELISA Kit (ab183360)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



To learn more about the advantages of recombinant antibodies see **here**.



To learn more about the advantages of SimpleStep $\mathsf{ELISA}^{@}$ kits see $\underline{\mathsf{here}}$.

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