abcam

Product datasheet

Human Fractalkine ELISA Kit (CX3CI1) ab192145

SimpleStep ELISA

3 References 画像数 7

製品の概要

製品名

Human Fractalkine ELISA Kit (CX3CI1)

検出方法

Colorimetric

再現性

Intra-Assay(同時再現性)

サンプル	N	平均値	SD	CV%
Human milk	5			3%

Inter-Assay(日差再現性)

サンプル	N	平均值	SD	CV%
Human milk	3			4.7%

サンプルの種類

Cell culture supernatant, Milk, Urine, Serum, Hep Plasma, EDTA Plasma, Cit plasma, Cerebral

Spinal Fluid

アッセイタイプ

Sandwich (quantitative)

検出感度

1.18 pg/ml

検出範囲

3.91 pg/ml - 250 pg/ml

添加回収試験

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	95% - 98%
Milk	86	75% - 97%
Urine	93	92% - 95%
Serum	94	88% - 98%
Hep Plasma	84	83% - 86%
EDTA Plasma	88	84% - 91%

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サンプルの種類	平均 %	測定範囲
Cit plasma	97	90% - 102%
Cerebral Spinal Fluid	102	95% - 110%

全工程の試験時間

ステップ

種交差性

製品の概要

1h 30m

One step assay

交差種: Human

Human Fractalkine ELISA Kit (CX3CI1) (ab192145) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Fractalkine (CX3CI1) protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, milk, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Fractalkine (CX3CI1) with 1.18 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 SimpleStep ELISA® kits.

Fractalkine (CX3CL1 or Neurotactin) is a chemokine produced from a type I transmembrane protein on the cell surface. The soluble chemokine is generated by proteolytic cleavage and represents residues 25-100 of the full protein sequence. Fractalkine expression is primarily on epithelial cells. Fractalkine functions both in the full length transmembrane form (for adhesion) and

in the released soluble form (chemoattraction).

The standard protein in this assay is the soluble chemokine portion of Fractalkine.

試験プラットフォーム

Microplate

製品の特性

特記事項

保存方法

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

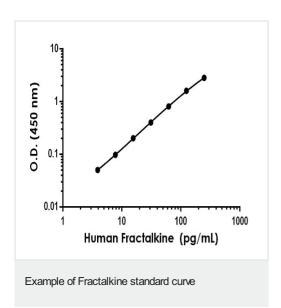
内容	1 x 96 tests
10X Human Fractalkine Capture Antibody	1 x 600µl
10X Human Fractalkine Detector Antibody	1 x 600µl

内容	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human Fractalkine 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

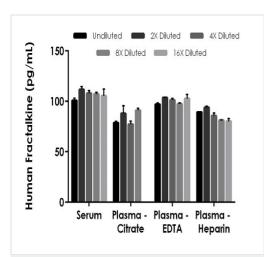
関連性

CX3CL1 is a member of the delta chemokine subfamily that contains a unique CX3C cysteine motif near the N-terminal. Unlike other known chemokines, it is a type 1 membrane protein containing a chemokine domain tethered on a long mucin-like stalk. CX3CL1, a leukocyte chemoattractant, is expressed in various tissues including the brain, heart, lung, kidney, skeletal muscle, and testis. The expression is reported to be up-regulated in endothelial cells and microglia by inflammatory signals. CX3CR1, a specific receptor for fractalkine, mediates both leukocyte migration and adhesion.

画像

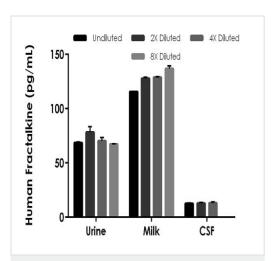


Background-subtracted data values (mean +/- SD) are graphed.



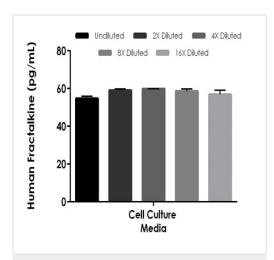
Interpolated concentrations of native Fractalkine in human serum, plasma samples.

The concentrations of Fractalkine were measured in duplicates, interpolated from the Fractalkine standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 12.5%, plasma (heparin) 25% and plasma (EDTA) 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Fractalkine concentration was determined to be 107 pg/mL in serum, 67 pg/mL in plasma (citrate), 86 pg/mL in plasma (heparin) and 100 pg/mL in plasma (EDTA).



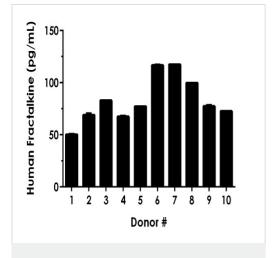
Interpolated concentrations of native Fractalkine in human urine, milk and CSF samples.

The concentrations of Fractalkine were measured in duplicates, interpolated from the Fractalkine standard curves and corrected for sample dilution. Undiluted samples are as follows: urine 25%, milk 12.5, and CSF 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Fractalkine concentration was determined to be 71 pg/mL in urine, 127 pg/mL in milk, and 13 pg/mL in CSF.



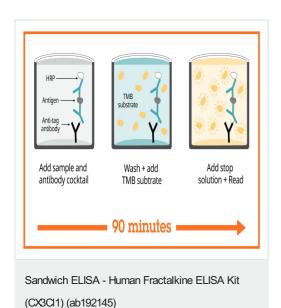
Interpolated concentrations of spike Fractalkine in human cell culture media sample.

The concentrations of Fractalkine were measured in duplicates, interpolated from the Fractalkine standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

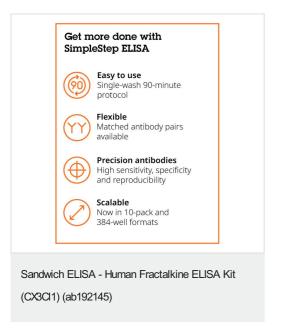


Interpolated concentrations of Fractalkine in Human serum from 10 donors.

Serum from 10 apparently healthy male donors was measured in duplicate. The mean Fractalkine concentration was determined to be 83 pg/mL with a range of 50-118 pg/mL.



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 SimpleStep $\mathsf{ELISA}^{@}$ kits see **here**.

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