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Product datasheet

Human CXCL7 / PBP ELISA Kit ab216171

יילעבער SimpleStep ELISA

★★★★★ 2 Abreviews 1 References 画像数 8

製品の概要

製品名 Human CXCL7 / PBP ELISA Kit

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%
Plasma	8			3.1%

Inter-Assay(日差再現性)

サンプル	N	平均值	SD	CV%	
Plasma	3			4.9%	

サンプルの種類 Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 0.51 pg/ml

検出範囲 4.69 pg/ml - 300 pg/ml

添加回収試験 特定サンブルでの回収試験

サンプルの種類	平均 %	測定範囲
Serum	90	84% - 95%
Hep Plasma	88	84% - 90%
EDTA Plasma	94	89% - 99%
Cit plasma	94	92% - 96%

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

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非交差種: Cow

Human CXCL7 / PBP ELISA Kit (ab216171) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CXCL7 / PBP protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CXCL7 / PBP with 0.51 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.

CXCL7 / PBP is a platelet-derived growth factor that belongs to the CXC chemokine family. It is a potent chemoattractant and activator of neutrophils and has been shown to stimulate various cellular processes including DNA synthesis, mitosis, glycolysis, intracellular cAMP accumulation, and prostaglandin E2 secretion. It also stimulates the formation and secretion of plasminogen activator by synovial cells. Mouse and rat CXCL7 / PBP both have 66% sequence homology compared to human CXCL7 / PBP.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

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 CXCL7 Detector Antibody	1 x 600µl
10X Human CXCL7 Capture Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml

製品の概要

内容	1 x 96 tests
Antibody Diluent 5BI	1 x 6ml
Human CXCL7 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

LA-PF4 stimulates DNA synthesis, mitosis, glycolysis, intracellular cAMP accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfated glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by human synovial cells. NAP-2 is a ligand for CXCR1 and CXCR2, and NAP-2, NAP-2(73), NAP-2(74), NAP-2(1-66), and most potent NAP-2(1-63) are chemoattractants and activators for neutrophils. TC-1 and TC-2 are antibacterial proteins, in vitro released from activated platelet alpha-granules. CTAP-III(1-81) is more potent than CTAP-III desensitize chemokine-induced neutrophil activation.

配列類似性

翻訳後修飾

Belongs to the intercrine alpha (chemokine CxC) family.

Proteolytic removal of residues 1-9 produces the active peptide connective tissue-activating

peptide III (CTAP-III) (low-affinity platelet factor IV (LA-PF4)).

Proteolytic removal of residues 1-13 produces the active peptide beta-thromboglobulin, which is

released from platelets along with platelet factor 4 and platelet-derived growth factor.

NAP-2 (1-66) is produced by proteolytical processing, probably after secretion by leukocytes other

than neutrophils.

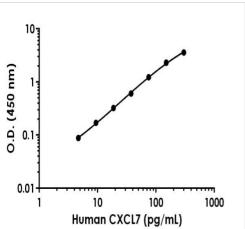
NAP-2(73) and NAP-2(74) seem not be produced by proteolytical processing of secreted

precursors but are released in an active form from platelets.

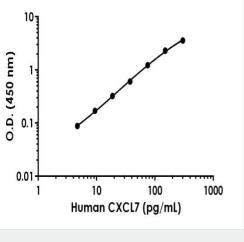
細胞内局在

Secreted.

画像

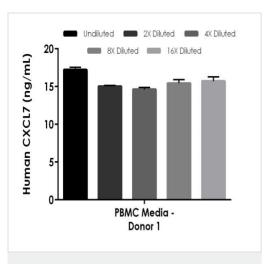


Example of human CXCL7 standard curve.



Undiluted 2X Diluted 4X Diluted 2000 Human CXCL7 (ng/mL) Plasma - Plasma -Plasma -Serum Citrate **EDTA** Heparin

Interpolated concentrations of native CXCL7 in human serum and plasma samples.

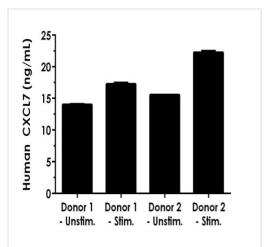


Interpolated concentrations of native CXCL7 in human cell culture supernatant samples.

The concentrations of CXCL7 were measured in duplicates, interpolated from the CXCL7 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:4,000, plasma (citrate) 1:8,000, plasma (EDTA) 1:3,000, and plasma (heparin) 1:3,000. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CXCL7 concentration was determined to be 1,106 ng/mL in neat serum, 1,434 ng/mL in neat plasma (citrate), 636 ng/mL in neat plasma (EDTA), and 604 ng/mL in neat plasma (heparin).

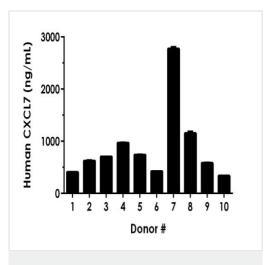
Background-subtracted data values (mean +/- SD) are graphed.

The concentrations of CXCL7 were measured in duplicates, interpolated from the CXCL7 standard curves and corrected for sample dilution. Undiluted samples are as follows: PBMC supernatant 1:64. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CXCL7 concentration was determined to be 15.61 ng/mL in neat PBMC supernatant.



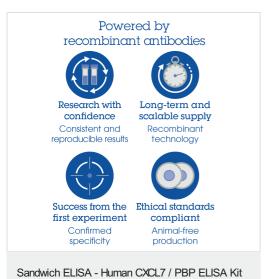
PBMC media samples were cultured in RPMI media with 10% Fetal Bovine Serum for 48 hours without (unstimulated) or with (stimulated) 1.5% PHA-M.

Interpolated concentrations of native CXCL7 in unstimulated versus stimulated human cell culture supernatant samples.



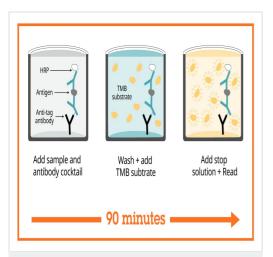
Serum from ten individual healthy human male donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CXCL7 concentration was determined to be 873 ng/mL with a range of 335-2800 ng/mL in neat human serum.



(ab216171)

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



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.

Sandwich ELISA - Human CXCL7 / PBP ELISA Kit (ab216171)



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

Sandwich ELISA - Human CXCL7 / PBP ELISA Kit (ab216171)

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