

Rat CKM ELISA Kit ab187396

SimpleStep ELISA

7 References [画像数 7](#)

製品の概要

製品名 Rat CKM 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%
Serum	8			4%

Inter-Assay (日差再現性)

サンプル	N	平均値	SD	CV%
Serum	3			5%

サンプルの種類 Serum, Tissue Extracts, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 5.83 ng/ml

検出範囲 8.8 ng/ml - 100 ng/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
Serum	94	89% - 97%
Extraction Buffer	96	87% - 101%

全工程の試験時間 1h 30m

ステップ One step assay

種交差性 交差種: Rat

製品の概要 Rat CKM ELISA Kit (ab187396) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CKM protein in serum, tissue extracts, and cit plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Rat CKM with 5.83 ng/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 (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

特記事項

Creatine kinase (CK), also known as creatine phosphokinase (CPK) or phospho-creatine kinase, is an enzyme that catalyzes the reversible transfer of a high-energy phosphate group between phosphocreatine and ATP. There are five known CK isozymes, three located in the cytosol (CKMM, CKMB, CKBB) and two in the mitochondria (Mi_SCK and Mi_LCK). Structurally, cytosolic CK is a 86 kDa dimeric enzyme of two identical or non-identical chains, CKM and/or CKB whereas mitochondrial CK is an octameric enzyme associated with mitochondrial membranes. The compartmentation of CK isoenzymes allows for direct association with ATP-providing or consuming processes both linked via metabolite channeling through the creatine phosphate shuttle. Thus CK isoenzymes allow for the generation of a large pool of phosphocreatine, considered to be a temporal and spatial ATP buffering system in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.

Expression of cytosolic isoenzyme patterns differ between tissues, with skeletal muscle expressing high levels of CK-MM (98%) and low levels of CK-MB (1%), the myocardium (heart muscle) expressing CK-MM at 70% and CK-MB at 25–30% and the brain and neural tissue expressing mainly CK-BB. CKM is also found in serum from normal animals and levels vary based on muscle mass, age, physical activity and underlying pathologies.

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

Microplate

製品の特性

保存方法

Please refer to protocols.

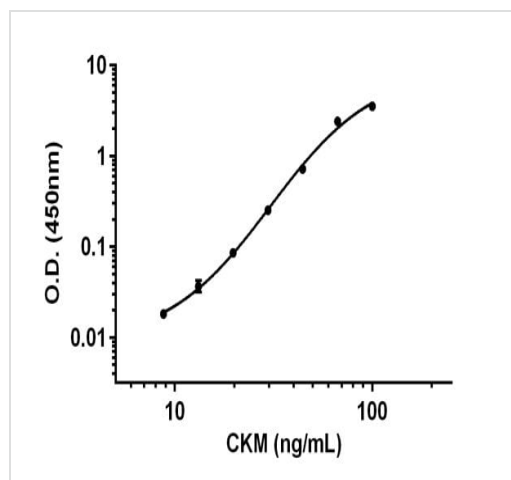
内容	1 x 96 tests
10X CKM Capture Antibody	1 x 600µl
10X CKM Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml

内容	1 x 96 tests
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 5BI	1 x 6ml
Plate Seals	1 unit
Rat CKM Lyophilized Purified Protein	2 vials
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

細胞内局在

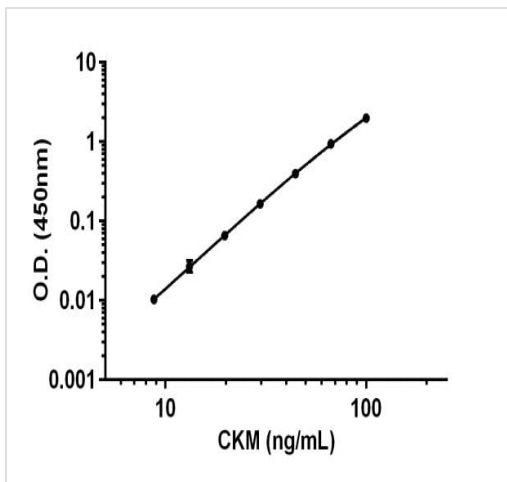
Cytoplasmic

画像



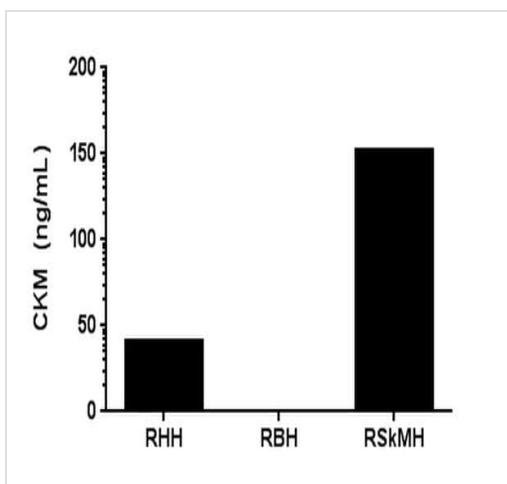
Background-subtracted data values (mean +/- SD) are graphed.

Example of CKM standard curve in Sample Diluent NS.



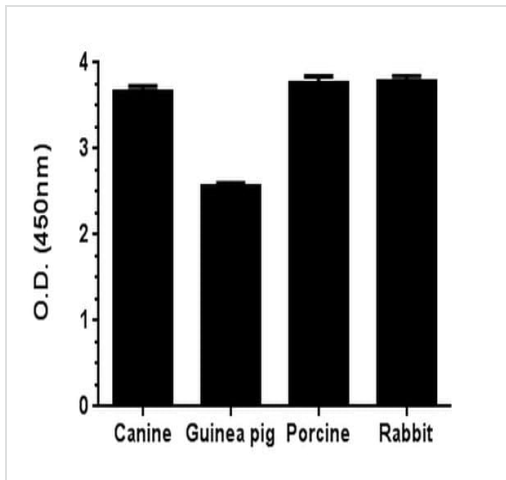
Background-subtracted data values (mean +/- SD) are graphed.

Example of CKM standard curve in Extraction Buffer PTR.



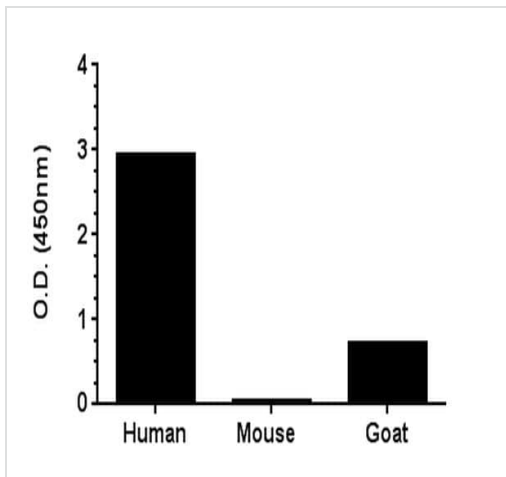
Levels of CKM in 10 µg/mL extract were interpolated from a standard curve in 1X Cell Extraction Buffer PTR.

Tissue specificity of CKM in rat tissue extracts, Rat Heart (RHH), brain (RBH) and Skeletal Muscle (RSKMh).



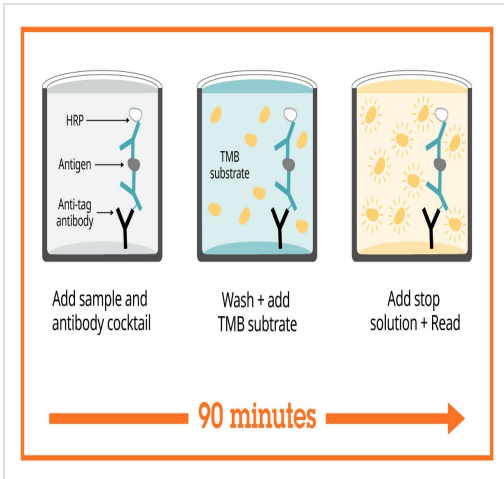
Serum species reactivity.

Canine, Guinea pig, Porcine and Rabbit serum was loaded in the assay at 2.5% in Sample Diluent NS. Absorbance levels after background subtraction are displayed.



Serum species reactivity.




Human, Mouse and Goat serum was loaded in the assay at 1% in Sample Diluent NS. Absorbance levels after background subtraction are displayed.



Sandwich ELISA - Rat CKM ELISA Kit (ab187396)

SimpleStep ELISA technology allows the formation of the antibody-antigen 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.

Get more done with SimpleStep ELISA

-  **Easy to use**
Single-wash 90-minute protocol
-  **Flexible**
Matched antibody pairs available
-  **Precision antibodies**
High sensitivity, specificity and reproducibility
-  **Scalable**
Now in 10-pack and 384-well formats

Sandwich ELISA - Rat CKM ELISA Kit (ab187396)

To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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