abcam

Product datasheet

Total OXPHOS Rodent WB Antibody Cocktail ab110413

★★★★★ 18 Abreviews 1024 References 画像数 8

製品の概要

製品名	Total OXPHOS Rodent WB Antibody Cocktail
アッセイタイプ	Semi-quantitative
種交差性	**交差種:** Mouse, Rat, Cow, Human, Cynomolgus monkey
製品の概要	Total OXPHOS Rodent WB Antibody Cocktail ab110413 is an optimized cocktail of high quality antibodies for analyzing relative levels of OXPHOS complexes in rat or mouse mitochondria by western blot. This OXPHOS cocktail contains 5 mouse mAbs, one each against CI subunit NDUFB8 (**ab110242**), CII-30kDa (**ab14714**), CIII-Core protein 2 (**ab14745**), CIV subunit I (**ab14705**) and CV alpha subunit (**ab14748**) as an optimized premixed cocktail. The kit is suitable for Western Blotting analysis of the relative levels of the 5 OXPHOS complexes in mitochondrial preparations from mouse, rat, human, or bovine sources. The positive control supplied with the cocktail is **ab110341**. Altered levels of assembly can arise from mutations in individual subunits, mutations in assembly factors for the complex(es), mtDNA depletion or as a result of physiological and or pathological changes e.g. hormone treatment, exercise, diet or oxidative stress. The mAbs in the cocktail were chosen because they are each against a subunit that is labile when its complex is not assembled. Also, the different subunits are easily resolved in SDS-PAGE (see protocols). Note: Mouse tissue samples can easily be contaminated with antibodies from the animal's blood. To avoid background bands, use ab110413 with an anti-mouse secondary against native antibodies. Also, COXI is a highly hydrophobic protein and appears as a broad band at ~35 kDa (not at its true molecular weight at 57 kDa). It is very sensitive to heating. Therefore, the samples, including the positive control, should not be heated over 50°C before loaded on the gel. The Western blot cocktail is supplied at a concentration of 1.5 mg/mL. We recommend using a high pH CAPS / PVDF transfer protocol when using this antibody for Western blot.

Store the antibody cocktail at 4°C and the control sample at -80°C.

特記事項 **Related products**

Review the **mitochondrial assay guide**, or the full **metabolism assay guide** to learn about more assays for metabolites, metabolic enzymes, mitochondrial function, and oxidative stress, and also how to assay metabolic function in live cells using your plate reader.

アプリケーション **適用あり:** WB

製品の特性

保存方法 Store at -80°C. Please refer to protocols.

内容	300 µg
Cocktail of 5 Antibodies	1 x 300µg
Rat Heart Mitochondria Western Blot Control	1 x 50µg

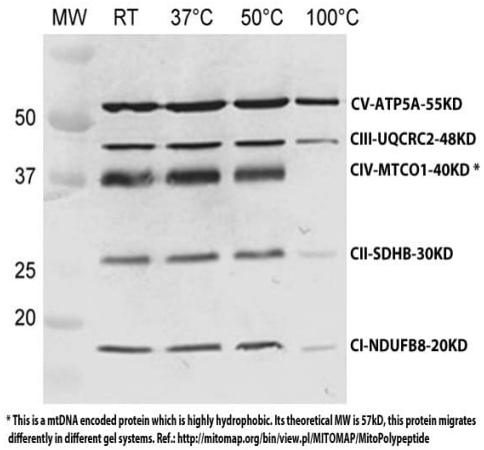
アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab110413の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

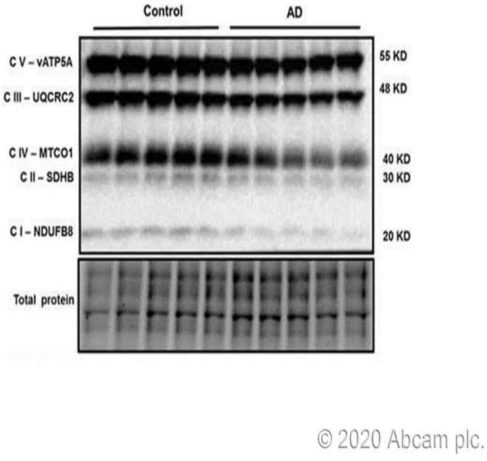
アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. The antibody cocktail (1.5 mg/mL) should be diluted 250x to a final working concentration of 6.0 µg/mL for Western blotting. We recommend using PBS with 1% milk as the antibody diluent. Store the antibody cocktail at 4°C and the control sample at -80°C.

画像



Western blot - MitoProfile® Total OXPHOS Rodent WB Antibody Cocktail (ab110413)

Rat liver mitochondria labeled with ab110413 (MS604). The sample in lane 1 was kept at room temperature, whereas the remaining three samples were heated to 37°C, 50°C, and 100°C, respectively. This blot shows that boiling of samples leads to a decrease in signal due to aggregation of proteins therefore heating samples at or close to boiling is not recommended.



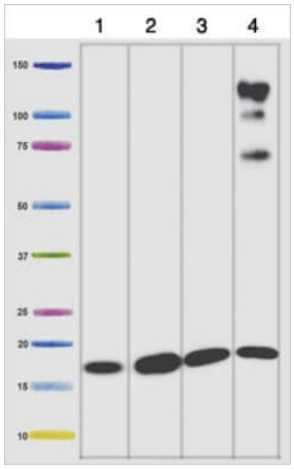
AbReview

This image is courtesy of Aida Adlimoghaddam

Isolated mitochondria from mice brain (control and Alzheimer's disease (AD)) labeled with ab110413 at 1/1000 dilution in 5% BSA.

This image shows NADH dehydrogenase beta subcomplex subunit 8 of Complex I (NDUFB8), succinate dehydrogenase subunit B of Complex II (SDHB), cytochrome c oxidase subunit 1 of Complex IV (MTCO1), cytochrome b-c1 complex subunit 2 of Complex III (UQCRC2) and ATP synthase subunit alpha of Complex V (ATP5A).

See Abreview



CI subunit NDUFB8 (

ab110242

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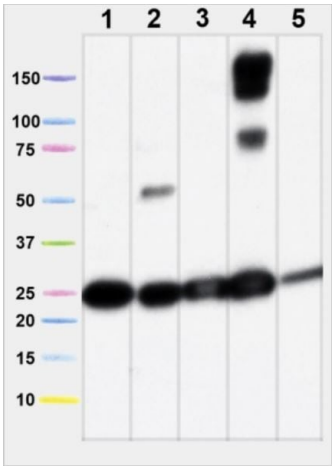
Isolated mitochondria from heart of human (5 µg - Lane 1), cow (1 ug - Lane 2), rat (10 µg - Lane 3), mouse (10 µg - Lane 4) labeling CI subunit NDUFB8 with **ab110242** at 0.5 ug/ml.

Extra bands in the mouse sample (lane 4) are due to the reaction of the IgG-specific goat anti-mouse secondary antibody with residual mouse blood in the heart tissue, as it is very difficult to entirely remove the blood from these small organs.



CII-30kDa (

ab14714

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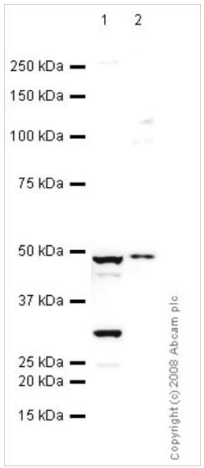
Isolated mitochondria from heart of human (5 µg - Lane 1), cow (1 ug - Lane 2), rat (10 µg - Lane 3), mouse (10 µg - Lane 4), HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate (20 µg -Lane 5) labeling CII-30kDa with **ab14714** at 5 µg/mL. Secondary antibody is a goat anti-mouse antibody.

Extra bands in the mouse sample (lane 4) are due to the reaction of the IgG-specific goat anti-mouse secondary antibody with residual mouse blood in the heart tissue, as it is very difficult to entirely remove the blood from these small organs.



CIII-Core protein 2 (

ab14745

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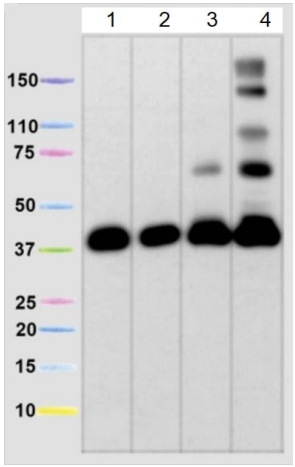
Human skeletal muscle tissue lysate, (10 µg - Lane 1) and Ramos (human Burkitt's lymphoma cell line) whole cell lysate (10 µg - Lane 2) labeling CIII-Core protein 2 with **ab14745** at 5 µg/mL. Secondary antibody is a goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP), 1/3000 dilution.



CIV subunit I (

ab14705

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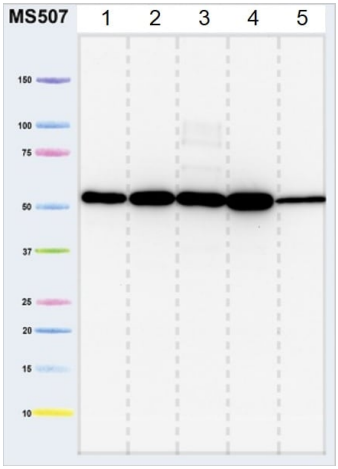
Isolated mitochondria from heart of human (5 µg - Lane 1), cow (1 ug - Lane 2), rat (10 µg - Lane 3), mouse (5 µg - Lane 4) labeling CIV subunit I with **ab14705** at 0.5 µg/mL. Secondary antibody is a goat anti-mouse antibody.

Extra bands in the mouse sample (lane 4) are due to the reaction of the IgG-specific goat anti-mouse secondary antibody with residual mouse blood in the heart tissue, as it is very difficult to entirely remove the blood from these small organs.



CV alpha subunit (

ab14748

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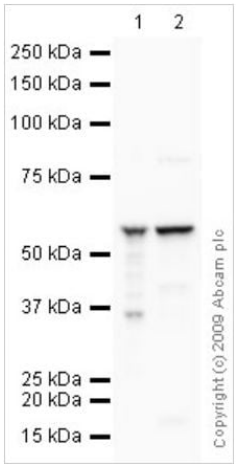
Isolated mitochondria from heart of human (10 µg - Lane 1), cow (4 µg - Lane 2), rat (10 µg - Lane 3), mouse (10 µg - Lane 4), HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate (20 µg -Lane 5) labeling CV alpha subunit with **ab14748** at 1 µg/mL



CV alpha subunit (

ab14748

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Human liver tissue lysate, (10 µg - Lane 1) and HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate (10 µg - Lane 2) labeling CV alpha subunit with **ab14748** at 1 µg/mL. Secondary antibody is a goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP), 1/3000 dilution.

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