

Total OXPHOS Blue Native WB Antibody Cocktail ab110412

★★★★★ [1 Abreviews](#) [46 References](#) [画像数 1](#)

製品の概要

製品名	Total OXPHOS Blue Native WB Antibody Cocktail
アッセイタイプ	Quantitative
種交差性	交差種: Mouse, Rat, Cow, Human
製品の概要	<p>Blue Native polyacrylamide gel electrophoresis (BN-PAGE) is a simple and effective way to subfractionate mitochondrial proteins as intact complexes on a single gel (in one dimension). It can be used to detect altered assembly of these complexes arising from mutations in subunits, mutations in assembly factors, or mtDNA depletion. This type of analysis has been performed with biopsy samples, platelets and fibroblast cells from patients with suspected mitochondrial diseases.</p> <p>In this method, multisubunit enzymes bind a charged dye Coomassie brilliant blue which allows their electrophoretic separation in the first dimension by the size of the complex. Complexes I-V with masses ranging from 950K to 200K are well resolved in the first dimension. The separated proteins can then be transferred to nitrocellulose membrane/PVDF by electrophoresis and Complexes I, II, III, IV and ATP synthase can be detected by mAbs against C1-NDUFA9 ab14713(MS111), CII-70 kDa subunit ab14715(MS204), CIII-Core protein 2 ab14745(MS304), CIV-subunit IV ab14744(MS407) and CV-alpha subunit ab14748(MS507) respectively. Such one dimensional gels, are best analyzed by using single mAbs against each complex. Other Complex I mAbs are available for BN-PAGE, specifically anti-GRIM-19 ab110240(MS103) and anti-20 kDa ab110242(MS105). A sample of purified bovine heart mitochondria ab110338(MS802) is available as a BN-PAGE control sample.</p> <p>Sometimes a greater separation of enzymes is necessary - it is possible to separate the proteins within each individual complex. To do this, blotting is NOT performed after the first (NATIVE) dimension, instead gels are turned 90 degrees and run in a perpendicular second dimension which is denaturing (NON-NATIVE). In this way the protein subunits within each complex are separated. Abcam provides an optimized pre-mixed cocktail of the mAbs to SIMULTANEOUSLY detect Complexes I-V after 2nd dimension blotting (specifically the cocktail contains ab14713 (MS111), ab14715 (MS204), ab14745 (MS304), ab14744(MS407) and ab14748 (MS507).</p> <p>Cocktail Antibodies:</p>

Mouse monoclonal [20C11B11B11] to (C-I) NDUFA9 ([ab14713](#)):

Amount: 120 µg

Working Concentration: 2 µg/ml

Mouse monoclonal [2E3GC12FB2AE2] to (C-II-70) SDHA ([ab14715](#)):

Amount: 6 µg

Working Concentration: 0.1 µg/ml

Mouse monoclonal [13G12AF12BB11] to (C-III-Core 2) UQCRC2 ([ab14745](#)):

Amount: 60 µg

Working Concentration: 1 µg/ml

Mouse monoclonal [20E8C12] to (C-IV-subunit IV) COX IV([ab14744](#)):

Amount: 60 µg

Working Concentration: 1 µg/ml

Mouse monoclonal [15H4C4] to (C-V-alpha) ATP5A ([ab14748](#)):

Amount: 60 µg

Working Concentration: 1 µg/ml

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**

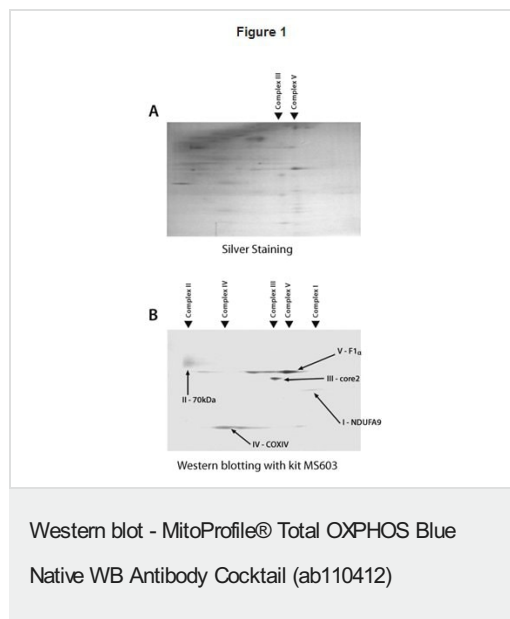
Store at -80°C. Please refer to protocols.

内容	300 µg
Antibody Cocktail	1 x 300µg
Bovine heart mitochondria control	1 unit

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ab110412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 a concentration of 6 µg/ml. The antibody cocktail (1.5 mg/mL) should be diluted 250x to a final working concentration of 6.0 µg/mL for Western blotting



Two dimension Blue Native PAGE analysis of fibroblasts that are (A) normal and (B) complex I deficient. It is clear that the complex I deficient cell line shown in B shows no detectable level of complex I. However, all other OXPHOS complexes appear normal including a minor amount of heterocomplex formed between complexes III and IV which is a well documented species. Only a minor mitochondrial enrichment was performed upon these samples cell lines. Each sample represents only 8% of confluent cells taken from a 10 cm diameter tissue culture dish.

MWs:

(C-I) NDUFA9 - 36kDa

(C-II-70) SDHA - 70kDa

(C-III-Core 2) UQRC2) - 45kDa

(C-IV subunit IV) COX IV - 15kDa

(C-V alpha) ATP5A - 55kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors