

Product datasheet

MitoBiogenesis™ Western Blot Cocktail ab123545

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Overview

Product name MitoBiogenesis™ Western Blot Cocktail

Species reactivity **Reacts with:** Mouse, Rat, Cow, Human

Product overview The MitoBiogenesis™ western blotting cocktail (ab123545) is designed to study the regulation of mitochondrial biogenesis and cellular stress in response to environmental stimuli. It also can be used to monitor drug-induced effects on mitochondrial biogenesis. The two main components of this cocktail target two proteins, which are each subunits of a different oxidative phosphorylation enzyme complex, one subunit I of Complex IV (COX-I), which is mtDNA-encoded, and the 70kDa subunit of Complex II (SDH-A), which is nDNA-encoded. Complex IV includes several proteins which are encoded in the mitochondrion, while the proteins of Complex II are entirely encoded in the nucleus. An anti-Beta actin antibody is used as loading control.

Cocktail Antibodies:

Mouse CII-70 (SDHA) [2E3GC12FB2AE2] monoclonal:

Amount: 25 µg

Working concentration: 0.5 µg/ml

Mouse CIV-1 (MT-CO1) [1D6E1A8] monoclonal:

Amount: 50 µg

Working concentration: 1 µg/ml

Mouse Beta actin [mAbcam 8224] monoclonal:

Amount: 25 µg

Working concentration: 0.5 µg/ml

Notes **Antibody Purity:** Near homogeneity as judged by SDS-PAGE. The antibodies were produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.

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.

Tested applications **Suitable for:** WB

Properties

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

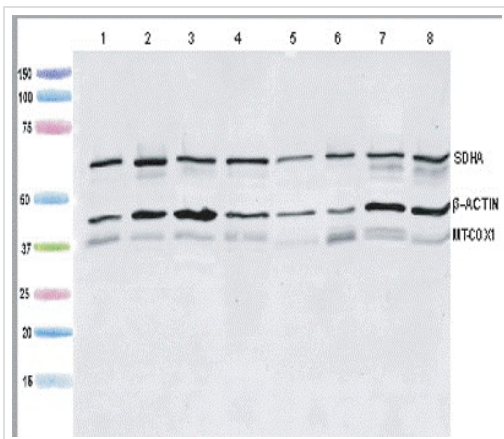
Components	100 µg
Antibody Cocktail	1 x 200µl

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab123545 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. The antibody cocktail should be diluted 250 X to a final working concentration of 2µg/mL for western blotting. 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

Images



Western blot - Biogenesis Western Blot Cocktail
(ab123545)

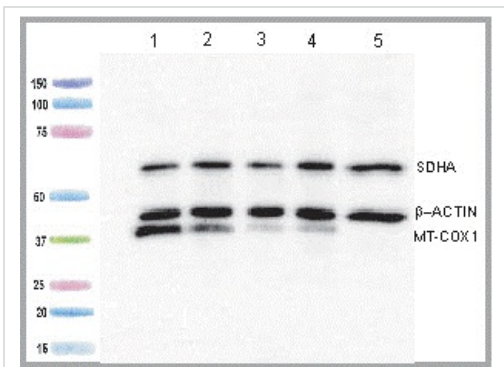
All lanes : MitoBiogenesis™ Western Blot Cocktail (ab123545) at 1/250 dilution

- Lane 1 :** Human HepG2 cell lysate
- Lane 2 :** Human HeLa cell lysate
- Lane 3 :** Human HDFn cell lysate
- Lane 4 :** Human SH-SY5Y cell lysate
- Lane 5 :** Rat H9C2 cell lysate
- Lane 6 :** Rat H4IIE cell lysate
- Lane 7 :** Mouse 3T3 cell lysate
- Lane 8 :** Mouse MEF cell lysate

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : GAM-HRP at 1/3000 dilution



Western blot - Biogenesis Western Blot Cocktail
(ab123545)

All lanes : MitoBiogenesis™ Western Blot Cocktail (ab123545) at 1/250 dilution

- Lane 1 :** Human HepG2 cell lysate (vehicle treated)
- Lane 2 :** Human HepG2 cell lysate (Chloramphenicol treated)
- Lane 3 :** Human HepG2 cell lysate (DDC treated)
- Lane 4 :** Human 143B WT cell lysate
- Lane 5 :** Human 143B p0 cell lysate

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : GAM-HRP at 1/3000 dilution

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

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