abcam

Product datasheet

Anti-Complex I Immunocapture antibody [18G12BC2] ab109798

16 References 画像数 4

製品の概要

製品名 Anti-Complex I Immunocapture antibody [18G12BC2]

製品の詳細 Mouse monoclonal [18G12BC2] to Complex I Immunocapture

由来種 Mouse

アプリケーション 適用あり: ICC/IF, Flow Cyt, IP

種交差性 交差種: Mouse, Rat, Cow, Human

免疫原 Full length protein. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Cow heart tissue lysate - mitochondrial extract (ab110338) can be used as a positive control in

WB. fibroblasts, HL-60 cells, tissue mitochondria

特記事項 This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Product was previously marketed under the MitoSciences sub-brand.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.5

Preservative: 0.02% Sodium azide
Constituent: 99% HEPES buffered saline

精製度 IgG fraction

特記事項(精製) Near homogeneity as judged by SDS-PAGE. The antibody was produced in vitro using

hybridomas grown in serum-free medium, and then purified by biochemical fractionation.

ポリ/モノ モノクローナル

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クローン名 18G12BC2

アイソタイプ lgG2b **軽鎖の種類** kappa

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab109798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。

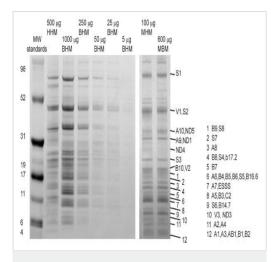
アプリケーション	Abreviews	特記事項
ICC/IF		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.
IP		Use a concentration of 0.1 - 1 mg/ml. 100 µg mAb can capture at least 25 µg complex I from 1 mg solubilized bovine heart mitochondria.

ターゲット情報

関連性

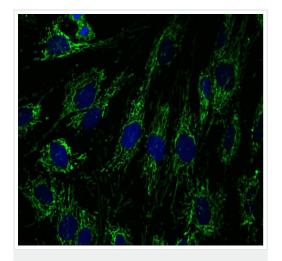
Complex I, or NADH ubiquinone oxidoreductase, is a large protein complex of 950,000 Da molecular weight made up by 45 to 46 different subunits. A total of seven of the subunits of the complex are encoded by mitochondrial DNA, while the remainder subunits are nuclear encoded, which are translated in the cytosol and translocated into the organelle for assembly at the inner membrane. The enzyme complex catalyses electron entry from NADH via a flavin (FMN) and several non-heme iron centers. Complex I is sensitive to a wide range of inhibitors, many of which are pesticides or other common environmental toxins, such as rotenone. Complex I dysfunction is a common cause of genetic OXPHOS defects. Altered functioning of this complex is also thought to contribute to several neurological disorders including Parkinson's disease and schizophrenia. Also, there is evidence of Complex I involvement in diabetes.

画像



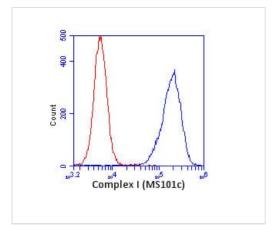
Immunoprecipitation - Anti-Complex I Immunocapture antibody [18G12BC2] (ab109798)

Complex I was immunopurified from mitochondria isolated from human heart (HHM), cow/bovine heart (BHM), mouse heart (MHM) and mouse brain (MBM). The lanes were stained with Coomassie Brilliant Blue R. Bands were excised from the gel and proteolytically digested for mass spectrometry analysis. For the immuno-isolation, 50 μ g of mAb (18G12BC2 ab109798) was bound to 5 μ l of swollen protein G agarose beads according to protocol described <u>here</u>.



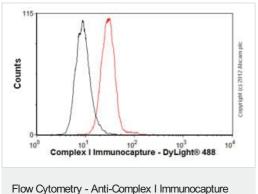
Immunocytochemistry/ Immunofluorescence - Anti-Complex I Immunocapture antibody [18G12BC2] (ab109798)

Immunocytochemistry image of ab109798 stained fibroblasts cells. The cells were paraformaldehyde fixed (4%, 20 minutes) and Triton X-100 permeabilized (0.1%, 15 minutes). The cells were incubated with the antibody (ab109798, 1 µg/mL) for 2 hours at room temperature or over night at 4°C. The secondary antibody was (green) Alexa Fluor® 4884 goat anti-mouse IgG (H+L) at a 1/1000 dilution for 1 hour. 10% Goat serum was used as the blocking agent for all blocking steps. The target protein locates to the mitochondria.



Flow Cytometry - Anti-Complex I Immunocapture antibody [18G12BC2] (ab109798)

HL-60 cells were stained with 1 μ g/mL Complex I antibody ab109798 (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.



Flow Cytometry - Anti-Complex I Immunocapture antibody [18G12BC2] (ab109798)

Overlay histogram showing HepG2 cells stained with ab109798 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab109798, 2 μ g/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight[®] 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2b [PLPV219] (ab91366, 2 μ g/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

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