

Anti-CDC42 antibody [M152] ab41429

KO 評価済

★★★★☆ [5 Abreviews](#) [16 References](#) [画像数 5](#)

製品の概要

製品名	Anti-CDC42 antibody [M152]
製品の詳細	Mouse monoclonal [M152] to CDC42
由来種	Mouse
特異性	The antibody detects a 21 kDa protein in human Jurkat cells and mouse brain. It does not recognize a human RhoA GST fusion protein.
アプリケーション	適用あり: ICC/IF, WB
種交差性	交差種: Mouse, Rat, Human
免疫原	Recombinant CDC42 (Rat)
ポジティブ・コントロール	WB: MCF7, HepG2, HAP1 and Jurkat cell lysate; Mouse brain lysate. ICC/IF: SH-SY5Y cells.
特記事項	<p>Do not aliquot.</p> <p>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.</p> <p>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</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at 4°C (up to 6 months). Store at -20°C.
バッファー	Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol, 0.1% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	M152
アイソタイプ	IgG1

アプリケーション

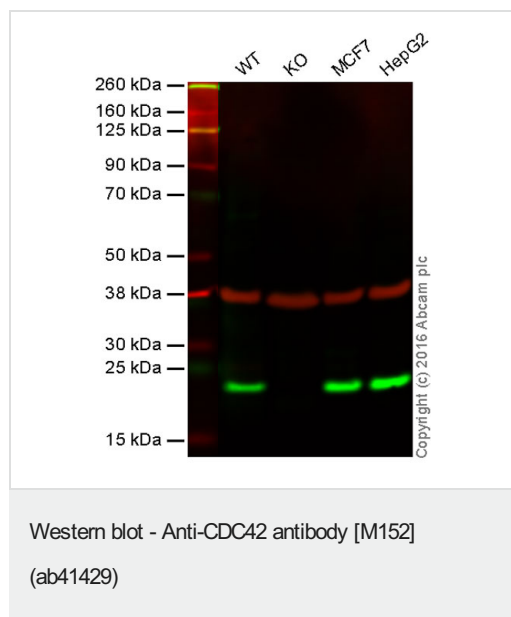
The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab41429の使用に適用されます
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/50.
WB	★★★★★ (3)	1/125 - 1/500. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).

ターゲット情報

機能	Plasma membrane-associated small GTPase which cycles between an active GTP-bound and an inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses. Involved in epithelial cell polarization processes. Causes the formation of thin, actin-rich surface projections called filopodia.
配列類似性	Belongs to the small GTPase superfamily. Rho family. CDC42 subfamily.
翻訳後修飾	AMPylation at Tyr-32 and Thr-35 are mediated by bacterial enzymes in case of infection by H.somnus and V.parahaemolyticus, respectively. AMPylation occurs in the effector region and leads to inactivation of the GTPase activity by preventing the interaction with downstream effectors, thereby inhibiting actin assembly in infected cells. It is unclear whether some human enzyme mediates AMPylation; FICD has such ability in vitro but additional experiments remain to be done to confirm results in vivo.
細胞内局在	Cell membrane.
製品の状態	There are 2 isoforms produced by alternative splicing. Isoform 1 also known as: Brain; Isoform 2 also known as: Placental.

画像



Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: CDC42 knockout HAP1 cell lysate (20 µg)

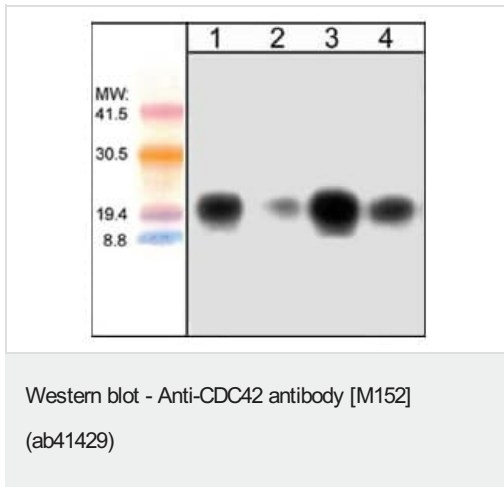
Lane 3: MCF7 cell lysate (20 µg)

Lane 4: HepG2 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab41429 observed at 20 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab41429 was shown to specifically react with CDC42 in wild-type HAP1 cells. No band was observed when CDC42 knockout samples were examined. Wild-type and CDC42 knockout samples were subjected to SDS-PAGE. ab41429 and **ab181602** (loading control to GAPDH) were diluted at 1/125 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**)

and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed ([ab216777](#)) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Lanes 1 & 3 : Anti-CDC42 antibody [M152] (ab41429) at 1/125 dilution

Lanes 2 & 4 : Anti-CDC42 antibody [M152] (ab41429) at 1/500 dilution

Lanes 1-2 : human jurkat cells

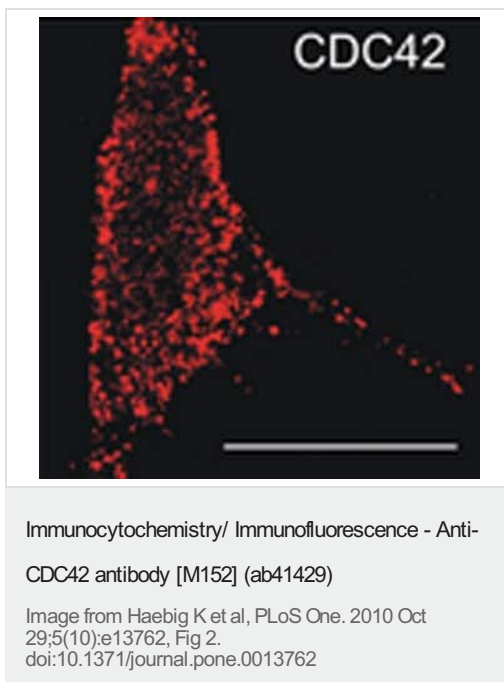
Lanes 3-4 : mouse brain

Lysates/proteins at 20 µg per lane.

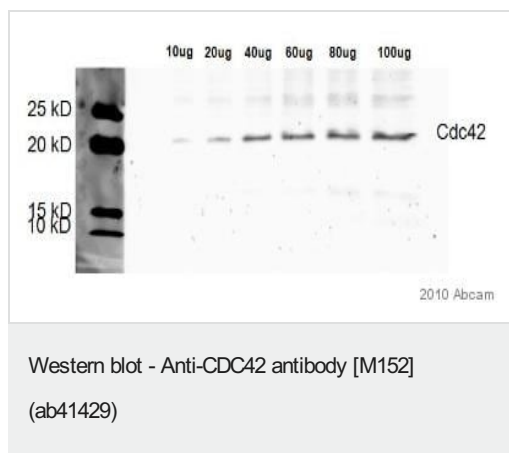
Predicted band size: 21 kDa

Observed band size: 21 kDa

Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween 20 for 1 hour at room temperature.



ab41429 staining CDC42 in SH-SY5Y cells by Immunocytochemistry/ Immunofluorescence. SH-SY5Y cells were differentiated 6 days with 10 µM retinoic acid and fixed with 4% paraformaldehyde in PBS. After 5 minutes incubation with ice-cold methanol the cells were washed twice with PBS and blocked with 10% normal donkey serum for 30 minutes. Incubation with primary antibody was performed over night at 4°C. After three-times washing with PBS, 1 hour incubation with the labeled Cy3 secondary antibody at 37°C the cells were mounted with DABCO/Mowiol.



All lanes : Anti-CDC42 antibody [M152] (ab41429) at 1/500 dilution

Lane 1 : Rabbit heart tissue lysate at 10 µg

Lane 2 : Rabbit heart tissue lysate at 20 µg

Lane 3 : Rabbit heart tissue lysate at 40 µg

Lane 4 : Rabbit heart tissue lysate at 60 µg

Lane 5 : Rabbit heart tissue lysate at 80 µg

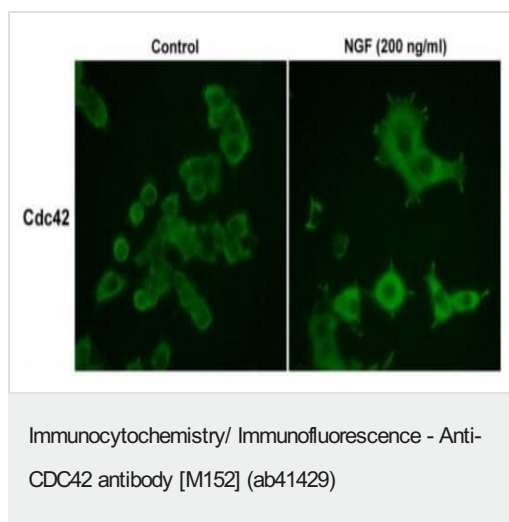
Lane 6 : Rabbit heart tissue lysate at 100 µg

Secondary

All lanes : Donkey anti-mouse IgG (HRP) at 1/50000 dilution

Developed using the ECL technique.

Predicted band size: 21 kDa



PC-12 (Rat adrenal gland pheochromocytoma cell line) cells grown for 4 days on poly-D-lysine-coated plates in the presence (200 ng/ml) or absence (control) of Nerve Growth Factor (NGF) labeling CDC42 with ab41429 in ICC/IF. Primary antibody was used at 1/50 dilution followed by a donkey anti-mouse secondary antibody (Cy2).

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