abcam

Product datasheet

Anti-HIF-2-alpha antibody [EPR19656] ab207607

יעלאעבע RabMAb

5 References 画像数5

製品の概要

製品名 Anti-HIF-2-alpha antibody [EPR19656]

製品の詳細 Rabbit monoclonal [EPR19656] to HIF-2-alpha

由来種 Rabbit

アプリケーション 適用あり: IP, WB, ICC/IF

種交差性 交差種: Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Whole cell lysate of HeLa cells treated with 1mM deferoxamine (DFO) mesylate salt for 24h;

Whole cell lysate of HeLa cells treated with 100µM CoCl2 for 24h. ICC/IF: HeLa cells treated with

DFO mesylate salt (1mM, 24h).

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル EPR19656 クローン名

アプリケーション

Abpromise保証は、次のテスト済みアプリケーションにおけるab207607の使用に適用されます The Abpromise guarantee 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
IP		1/30.
WB		1/1000. Detects a band of approximately 110 kDa (predicted molecular weight: 96 kDa).
ICC/IF		1/100.

ターゲット情報

Alak	- Labo	
7200	ED:	
1192	RIG	

Transcription factor involved in the induction of oxygen regulated genes. Binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. Regulates the vascular endothelial growth factor (VEGF) expression and seems to be implicated in the development of blood vessels and the tubular system of lung. May also play a role in the formation of the endothelium that gives rise to the blood brain barrier. Potent activator of the Tie-2 tyrosine kinase expression. Activation seems to require recruitment of transcriptional coactivators such as CREBPB and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD.

組織特異性

Expressed in most tissues, with highest levels in placenta, lung and heart. Selectively expressed in endothelial cells.

関連疾患

Defects in EPAS1 are the cause of erythrocytosis familial type 4 (ECYT4) [MIM:611783]. ECYT4 is an autosomal dominant disorder characterized by increased serum red blood cell mass, elevated hemoglobin concentration and hematocrit, and normal platelet and leukocyte counts.

配列類似性

Contains 1 basic helix-loop-helix (bHLH) domain. Contains 1 PAC (PAS-associated C-terminal) domain.

翻訳後修飾

In normoxia, is probably hydroxylated on Pro-405 and Pro-531 by EGLN1/PHD1, EGLN2/PHD2 and/or EGLN3/PHD3. The hydroxylated prolines promote interaction with VHL, initiating rapid ubiquitination and subsequent proteasomal degradation. Under hypoxia, proline hydroxylation is

impaired and ubiquitination is attenuated, resulting in stabilization.

In normoxia, is hydroxylated on Asn-847 by HIF1AN thus probably abrogating interaction with

CREBBP and EP300 and preventing transcriptional activation.

Phosphorylated on multiple sites in the CTAD.

Contains 2 PAS (PER-ARNT-SIM) domains.

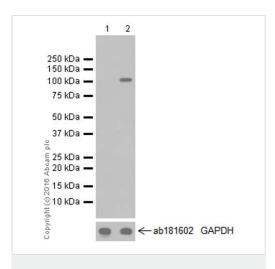
The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within

HIF CTAD domains.

細胞内局在

Nucleus.

画像



Western blot - Anti-HIF-2-alpha antibody [EPR19656] (ab207607)

All lanes : Anti-HIF-2-alpha antibody [EPR19656] (ab207607) at 1/1000 dilution

Lane 1 : Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : Whole cell lysate of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells treated with 1mM deferoxamine (DFO) mesylate salt for 24h

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

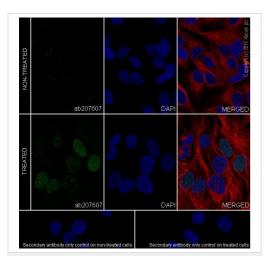
Predicted band size: 96 kDa

Observed band size: 110 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with the literature, and the expression level can be induced under hypoxia or treated with hypoxia mimetic chemicals such as DFO (PMID: 25587023, 10934146, 23958427 and 21571835).



Immunocytochemistry/ Immunofluorescence - Anti-HIF-2-alpha antibody [EPR19656] (ab207607)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells, untreated or treated with deferoxamine mesylate salt (1mM, 24h), labeling HIF-2-alpha with ab207607 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on HeLa cells treated with deferoxamine mesylate salt (1mM, 24h).

The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary

antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor $^{(\!0\!)}$ 488) (ab150077) at 1/1000 dilution.

1 2 3
IP
Input +
250 kDa —

150 kDa —

150 kDa —

75 kDa —

37 kDa —

25 kDa —

20 kDa —

20 kDa —

Immunoprecipitation - Anti-HIF-2-alpha antibody [EPR19656] (ab207607)

HIF-2-alpha was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) cell treated with 1mM DFO for 24h, cell lysate 10 µg with ab207607 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab207607 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) cell lysate (10 μ g) treated with 1mM DFO for 24h

Lane 2: ab207607 IP in DFO treated HeLa cell lysate

Lane 3: Rabbit monoclonal lgG ($\underline{ab172730}$) instead of ab207607 in HeLa cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 75 seconds

1 2

250 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
37 kDa —
90 kDa —
91 kDa —
92 kDa —
93 kDa —
94 kDa —
95 kDa —
96 kDa —
97 kDa —
98 kDa —
98 kDa —
99 kDa —
99 kDa —
99 kDa —
99 kDa —
90 k

Western blot - Anti-HIF-2-alpha antibody [EPR19656] (ab207607) **All lanes :** Anti-HIF-2-alpha antibody [EPR19656] (ab207607) at 1/1000 dilution

Lane 1 : Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2: Whole cell lysate of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells treated with 100µM CoCl2 for 24h

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 96 kDa **Observed band size:** 110 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with the literature, and

the expression level can be induced under hypoxia or treated with hypoxia mimetic chemicals such as CoCl₂ (PMID: 21571835, 10934146 and 23958427).



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