# abcam

## Product datasheet

## Anti-HIF-2-alpha antibody [BL-95-1A2] ab243861

リコンピナント

5 References 画像数 7

製品の概要

製品名 Anti-HIF-2-alpha antibody [BL-95-1A2]

製品の詳細 Rabbit monoclonal [BL-95-1A2] to HIF-2-alpha

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, IP, ChIP-sequencing, ICC, IHC-P, WB

種交差性 交差種: Human

免疫原 Synthetic peptide within Human HIF-2-alpha aa 400-450. The exact sequence is proprietary.

NP 001421.2 and Gene ID 2034.

Database link: Q99814

特記事項 This product is sold under License from Bethyl Laboratories, Inc.

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: 7.8

Preservative: 0.09% Sodium azide

Constituents: 98% Borate buffered saline, 0.1% BSA

特記事項(精製) Recombinant antibody was purified from cell culture supernatant.

**ポリ/モノ** モノクローナル **ウローン名** BL-95-1A2

アイソタイプ lgG

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ab243861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		1/100 - 1/500. Permeabilization with Triton-X 100 is recommended for formaldehyde-fixed cells.
IP		Use at an assay dependent concentration. Use 5-20µl/mg lysate.
ChIP-sequencing		Use a concentration of 10-40 - 30 µl/chromatin.
ICC		1/200 - 1/1000. Permeabilization with Triton-X 100 is recommended for formaldehyde-fixed cells.
IHC-P		1/200 - 1/1000. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.  Antigen retrieval with citrate buffer pH 6.0 for 20 minutes using a pressure cooker and overnight incubations are recommended.
WB		1/1000.

#### ターゲット情報

#### 機能

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.

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

## 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.

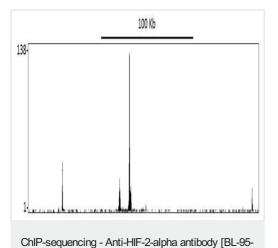
In normoxia, is hydroxylated on Asn-847 by HIF1AN thus probably abrogating interaction with CREBBP and EP300 and preventing transcriptional activation.

Phosphorylated on multiple sites in the CTAD.

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

1A2] (ab243861)

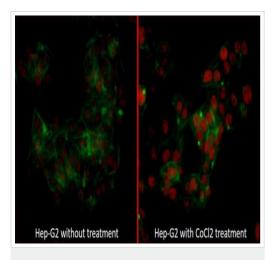
#### 画像



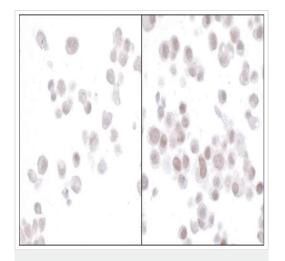
Chromatin from subcutaneous human tumor 786-O cells was immunoprecipitated with anti-HIF-2-alpha antibody ab243861 and analyzed by

DNA sequencing. The figure illustrates the peak distribution of HIF-2-alpha binding within a 250 Kb region of chromosome 11 as detected

using anti-HIF-2-alpha antibody ab243861. ChIP-seq validation performed by Active Motif, Carlsbad, CA.

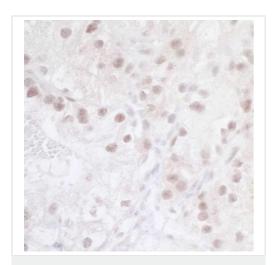


Immunocytochemistry/ Immunofluorescence - Anti-HIF-2-alpha antibody [BL-95-1A2] (ab243861) Formaldehyde-fixed HepG2 (human liver hepatocellular carcinoma cell line) cells untreated (Left) and treated with CoCl2 (right), labeling HIF-2 alpha (Red) using ab243861 at 1/100 dilution. DyLight® 594-conjugated goat anti-rabbit lgG was used as the secondary antibody at 1/100 dilution. Phalloidin Alexa Fluor® 488conjugated (green) was used as the counterstain.



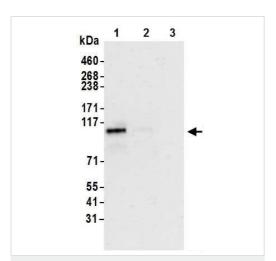
Immunocytochemistry - Anti-HIF-2-alpha antibody [BL-95-1A2] (ab243861)

Formalin-fixed, paraffin-embedded HepG2 (human liver hepatocellular carcinoma cell line) cells labeling HIF-2 alpha using ab243861 at 1/400 dilution in ICC/IF analysis. A HRP-conjugated goat-anti rabiit IgG was used as the secondary. DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HIF-2-alpha antibody [BL-95-1A2] (ab243861)

Formalin-fixed, paraffin-embedded human renal cell carcinoma tissue stained for HIF-2 alpha using ab243861 at 1/400 dilution in immunohistochemical analysis. A HRP-conjugated goat anti-rabbit IgG was used as the secondary. DAB staining.



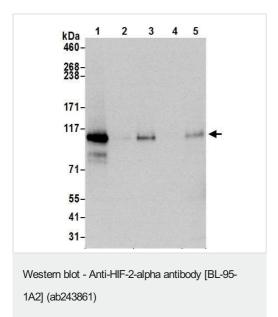
Immunoprecipitation - Anti-HIF-2-alpha antibody [BL-95-1A2] (ab243861)

HIF-2 alpha was immunoprecipitated from 1 mg HepG2 whole cell lysate with ab243861 at 20  $\mu$ L per reaction. Western blot was performed on the immunoprecipitate using ab243861 at 1/1000 dilution.

Lane 1: ab243861 IP in HepG2 cell lysate treated with 200  $\mu\text{M}$  CoCl2.

Lane 2: ab243861 IP in HepG2 whole cell lysate Mock treated.

Lane 3: Contol IgG in HepG2 cell lysate treated with 200 µM CoCl2.



**All lanes :** Anti-HIF-2-alpha antibody [BL-95-1A2] (ab243861) at 1/1000 dilution

Lane 1: HepG2 whole cell lysate treated with 200uM CoCl2

Lane 2: HepG2 whole cell lysate mock treated

Lane 3: HEK293T whole cell lysate treated with 200uM CoCl2

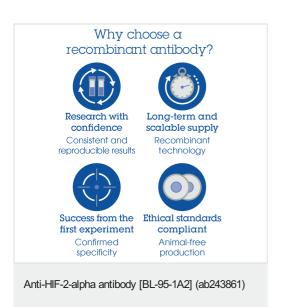
Lane 4: HEK293T whole cell lysate mock treated

Lane 5: 786-O whole cell lysate mock treated

Lysates/proteins at 15 µg per lane.

#### Secondary

All lanes: HRP-conjugated goat anti-rabbit lgG



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 <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

## Terms and conditions

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