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Product datasheet

Anti-HIF-2-alpha antibody [OTI2G5] ab157249

KO 評価済

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製品の概要

製品名	Anti-HIF-2-alpha antibody [OTI2G5]
製品の詳細	Mouse monoclonal [OTI2G5] to HIF-2-alpha
由来種	Mouse
アプリケーション	**適用あり:** WB
種交差性	**交差種:** Human
免疫原	Recombinant fragment corresponding to Human HIF-2-alpha aa 584-870. Sequence: LLDKFQQQLESKKTEPEHRPMSSIFFDAGSKASLPPCCGQAS TPLSSMGG RSNTQWPPDPPLHFGPTKWAVGDQRTEFLGAAPLGPPVSPPH VSTFKTRS AKGFGARGPDVLSPAMVALSNKLKLKRQLEYEEQAFQDLSGG DPPGGSTS HLMWKRMKNLRGGSCPLMPDKPLSANVPNDKFTQNPMRGLGH PLRHLPLP QPPSAISPGENSKSRFPPQCYATQYQDYSLSSAHKVSGMASR LLGPSFES YLLPELTRYDCEVNVPVLGSSTLLQGGDLLRALDQAT Run BLAST with Run BLAST with
ポジティブ・コントロール	HEK293T cells transfected with pCMV6-ENTRY HIF-2-alpha.
特記事項	The clone number has been updated from 2G5 to OTI2G5, both clone numbers name the same clone. 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

製品の特性

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製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 48% PBS, 50% Glycerol, 1% BSA
精製度	Protein G purified
特記事項（精製）	Purified from TCS
ポリ/モノ	モノクローナル
クローン名	OTI2G5
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ab157249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
WB	(1)	1/2000. Predicted molecular weight: 96 kDa.

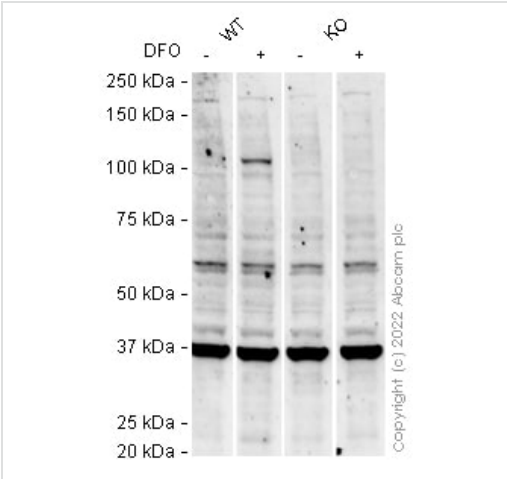
ターゲット情報

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.

細胞内局在 Nucleus.

画像



Western blot - Anti-HIF-2-alpha antibody [OTI2G5] (ab157249)

All lanes : Anti-HIF-2-alpha antibody [OTI2G5] (ab157249) at 1/500 dilution

Lane 1 : Wild-type A549 Untreated (DFO Control) cell lysate
Lane 2 : Wild-type A549 Treated DFO (1 mM, 24 h) cell lysate
Lane 3 : EPAS1 knockout A549 Untreated (DFO Control) cell lysate
Lane 4 : EPAS1 knockout A549 Treated DFO (1 mM, 24 h) cell lysate

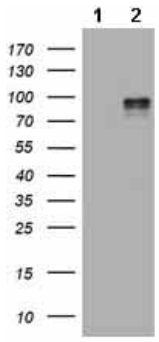
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 96 kDa
Observed band size: 100 kDa

False colour image of Western blot: Anti-HIF-2-alpha antibody [OTI2G5] staining at 1/500 dilution, shown in black; Rabbit Anti-GAPDH antibody [EPR16891] (**ab181602**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab157249 was shown to bind specifically to HIF-2-alpha. A band was observed at 100 kDa in treated wild-type A549 cell lysates with no signal observed at this size in EPAS1 knockout cell line **ab259774** (knockout cell lysate **ab259779**). To generate this image, wild-type and EPAS1 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % BSA in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times before development with Optiblot (ECL reagent **ab133456**) and imaged with 20 seconds exposure time. Secondary antibodies used were HRP conjugated Goat anti-Mouse (H+L) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed

(**ab216777**) at 1/20000 dilution.



Western blot - Anti-HIF-2-alpha antibody [OTI2G5] (ab157249)

All lanes : Anti-HIF-2-alpha antibody [OTI2G5] (ab157249) at 1/2000 dilution

Lane 1 : HEK293T cells transfected with pCMV6-ENTRY control
Lane 2 : HEK293T cells transfected with pCMV6-ENTRY HIF2 alpha

Lysates/proteins at 5 µg per lane.

Predicted band size: 96 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC216194)

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