


Anti-HIF-1 alpha antibody ab114977

★★★★★ [7 Abreviews](#) [17 References](#) [画像数 2](#)

製品の概要

製品名	Anti-HIF-1 alpha antibody
製品の詳細	Rabbit polyclonal to HIF-1 alpha
由来種	Rabbit
アプリケーション	適用あり: IHC-P, ICC
種交差性	交差種: Mouse, Human 交差が予測される動物種: Rat, Rabbit, Goat, Horse, Chicken, Guinea pig, Cow, Dog, Turkey, Pig, Carp, Chimpanzee, Zebrafish, Rhesus monkey, Gorilla, Orangutan 
免疫原	Synthetic peptide corresponding to Human HIF-1 alpha aa 750-850 (C terminal). Database link: Q16665
ポジティブ・コントロール	IHC-P: Mouse squamous cell carcinoma tissue; ICC: HeLa cells.
特記事項	Concentration is optimized for IHC and not determined. 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

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. Avoid freeze / thaw cycle.
バッファー	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 99% Tris buffered saline, 0.1% BSA
精製度	Protein A purified
特記事項 (精製)	ab114977 was affinity purified using an epitope specific to HIF-1-alpha immobilized on solid support.

ポリ/モノ
アイソタイプ

ポリクローナル
IgG

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ab114977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確認ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★☆ (2)	1/100 - 1/500. Epitope exposure is recommended. Epitope exposure with citrate or tris-EDTA pH9.0 buffer will enhance staining.
ICC		1/100 - 1/500.

ターゲット情報

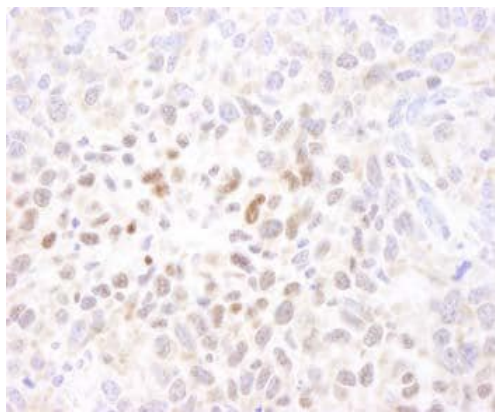
機能	Functions as a master transcriptional regulator of the adaptive response to hypoxia. Under hypoxic conditions activates the transcription of over 40 genes, including, erythropoietin, glucose transporters, glycolytic enzymes, vascular endothelial growth factor, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. Plays an essential role in embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease. Binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. Activation requires recruitment of transcriptional coactivators such as CREBBP and EP300. Activity is enhanced by interaction with both, NCOA1 or NCOA2. Interaction with redox regulatory protein APEX seems to activate CTAD and potentiates activation by NCOA1 and CREBBP.
組織特異性	Expressed in most tissues with highest levels in kidney and heart. Overexpressed in the majority of common human cancers and their metastases, due to the presence of intratumoral hypoxia and as a result of mutations in genes encoding oncoproteins and tumor suppressors.
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.
ドメイン	Contains two independent C-terminal transactivation domains, NTAD and CTAD, which function synergistically. Their transcriptional activity is repressed by an intervening inhibitory domain (ID).
翻訳後修飾	In normoxia, is hydroxylated on Pro-402 and Pro-564 in the oxygen-dependent degradation domain (ODD) by EGLN1/PHD1 and EGLN2/PHD2. EGLN3/PHD3 has also been shown to hydroxylate Pro-564. The hydroxylated prolines promote interaction with VHL, initiating rapid ubiquitination and subsequent proteasomal degradation. Deubiquitinated by USP20. Under hypoxia, proline hydroxylation is impaired and ubiquitination is attenuated, resulting in stabilization. In normoxia, is hydroxylated on Asn-803 by HIF1AN, thus abrogating interaction with CREBBP and EP300 and preventing transcriptional activation. This hydroxylation is inhibited by the Cu/Zn-chelator, Clioquinol. S-nitrosylation of Cys-800 may be responsible for increased recruitment of p300 coactivator necessary for transcriptional activity of HIF-1 complex. Requires phosphorylation for DNA-binding.

Sumoylated; by SUMO1 under hypoxia. Sumoylation is enhanced through interaction with RWDD3. Desumoylation by SENP1 leads to increased HIF1A stability and transcriptional activity. Ubiquitinated; in normoxia, following hydroxylation and interaction with VHL. Lys-532 appears to be the principal site of ubiquitination. Clioquinol, the Cu/Zn-chelator, inhibits ubiquitination through preventing hydroxylation at Asn-803. The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within HIF CTAD domains.

細胞内局在

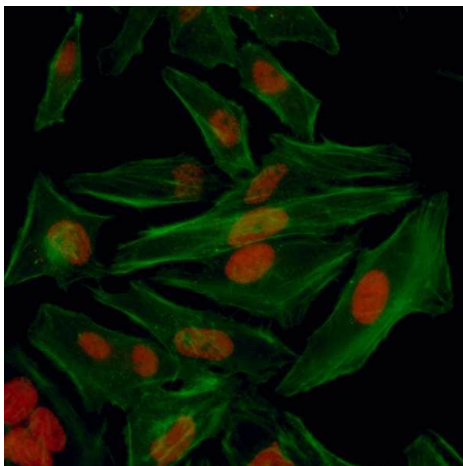
Cytoplasm. Nucleus. Cytoplasmic in normoxia, nuclear translocation in response to hypoxia. Colocalizes with SUMO1 in the nucleus, under hypoxia.

画像



ab114977 at 1:250 dilution staining HIF-1-alpha in Formalin-fixed, Paraffin-embedded Mouse squamous cell carcinoma tissue by Immunohistochemistry. Detection: DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HIF-1 alpha antibody (ab114977)



Immunocytochemistry analysis of formaldehyde-fixed asynchronous hypoxic HeLa (Human cervix adenocarcinoma epithelial cell line) cells labeling HIF-1 alpha with ab114977 at a 1/100 dilution.

Immunocytochemistry - Anti-HIF-1 alpha antibody (ab114977)

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