abcam

Product datasheet

Anti-HIF-2-alpha antibody [ep190b] ab8365

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Overview

Product name Anti-HIF-2-alpha antibody [ep190b]

Description Mouse monoclonal [ep190b] to HIF-2-alpha

Host species Mouse

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Predicted to work with: Rat

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

Positive control WB: Hypoxic A549 and HeLa cell lysate.

General notes

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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

Properties

Form Liquid

Storage instructions 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.

Storage buffer Preservative: 0.02% Sodium azide

Constituent: PBS

Purity Protein G purified

Clonality Monoclonal

Clone number ep190b

Myeloma NS1

1

Light chain type lgG1 kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab8365 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★ (3)	Use a concentration of 1 µg/ml. Predicted molecular weight: 100 kDa. Abcam recommends using a 3% milk block with this product.

Target

Function

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.

Tissue specificity

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

in endothelial cells.

Involvement in disease

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.

Sequence similarities

Contains 1 basic helix-loop-helix (bHLH) domain.

Contains 1 PAC (PAS-associated C-terminal) domain.

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

Post-translational modifications

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.

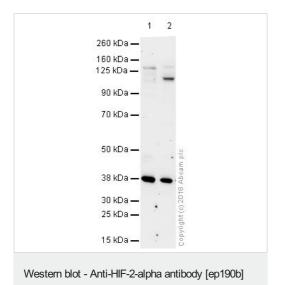
The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within

HIF CTAD domains.

Cellular localization

Nucleus.

Images



(ab8365)

All lanes : Anti-HIF-2-alpha antibody [ep190b] (ab8365) at 1/500 dilution

Lane 1: HeLa whole cell lysate

Lane 2: HeLa treated with 0.5mM DFO whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : HRP conjugated Goat Anti-Mouse IgG (H+L) at 1/10000 dilution

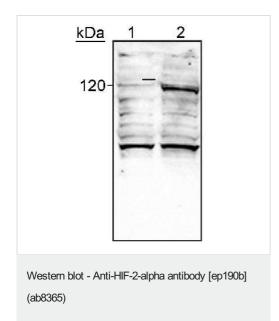
Developed using the ECL technique.

Performed under reducing conditions.

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

Exposure time: 20 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 55 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab8365 overnight at 4°C. Antibody binding was detected using a Goat anti-mouse antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.



HIF-2-alpha detected in hypoxic Human lysate using ab8365. Lane 1: normoxic A549 lysate control, lane 2: hypoxic A549 lysate.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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