

Product datasheet

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

★★★★☆ 1 Abreviews 5 References 1 Image

Overview

Product name	Anti-HIF-2-alpha antibody [OTI2G5]
Description	Mouse monoclonal [OTI2G5] to HIF-2-alpha
Host species	Mouse
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human
Immunogen	<p>Recombinant fragment corresponding to Human HIF-2-alpha aa 584-870. Sequence:</p> <pre>LLDKFQQQLESKKTEPEHRPMSSIFFDAGSKASLPPCCG QASTPLSSMGG RSNTQWPPDPPLHFGPTKWAVGDQRTEFLGAAPLGPPV SPPHVSTFKTRS AKGFGARGPDVLS PAMVALSNK LKLRQLEYEEQAFQDL SGGDPPGGSTS HLMWKR MKNLRGGSCPLMPDKPLSANVPNDKFTQNPMR GLGHPLRHLPLP QPPSAISPGENSKSRFPPQCYATQYQDYSLSSAHKVSGM ASRLLGPSFES YLLPELTRYDCEVNV PVLGSSTLLQGGDLLRALDQAT</pre> <p style="text-align: right;"> Run BLAST with Run BLAST with </p>
Positive control	HEK293T cells transfected with pCMV6-ENTRY HIF-2-alpha.
General notes	<p>The clone number has been updated from 2G5 to OTI2G5, both clone numbers name the same clone.</p> <p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 48% PBS, 50% Glycerol, 1% BSA
Purity	Protein G purified
Purification notes	Purified from TCS
Clonality	Monoclonal
Clone number	OT12G5
Isotype	IgG1

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab157249 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	★★★★☆ (1)	1/2000. Predicted molecular weight: 96 kDa.

Target

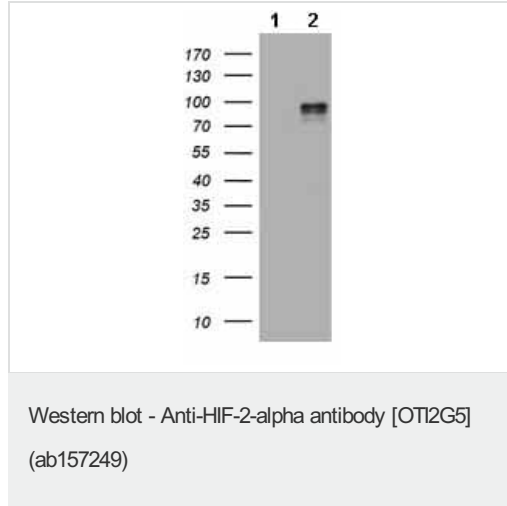
Function	Transcription factor involved in the induction of oxygen regulated genes. Binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. Regulates the vascular endothelial growth factor (VEGF) expression and seems to be implicated in the development 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 CREBBP 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



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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