

## Product datasheet

# HIF-2-alpha overexpression 293T lysate (whole cell) ab94045

[2 Images](#)

### Overview

<b>Product name</b>	HIF-2-alpha overexpression 293T lysate (whole cell)
<b>General notes</b>	ab94045 is a 293T cell transfected lysate in which Human HIF2 alpha has been transiently over-expressed using a pCMV-HIF2 alpha plasmid. The lysate is provided in 1X Sample Buffer.
<b>Tested applications</b>	<b>Suitable for:</b> WB

### Properties

<b>Mycoplasma free</b>	Yes
<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped on dry ice. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Constituents: 0.01% 3,3-bis(3,5-dibromo-4-hydroxyphenyl)-3H-2,1λ6-benzoxathiole-1,1-dione, 2.3% 2-Mercaptoethanol, 0.788% Tris HCl, 10% Glycerol (glycerin, glycerine), 2% Sodium lauryl sulfate
<b>Background</b>	<p>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. 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. Similarity: Contains 1 basic helix-loop-helix (bHLH) domain. Contains 1 PAC (PAS-associated C-terminal) domain. Contains 2 PAS (PER-ARNT-SIM) domains. PTM: 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.</p>

Phosphorylated on multiple sites in the CTAD. The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within HIF CTAD domains.

## Applications

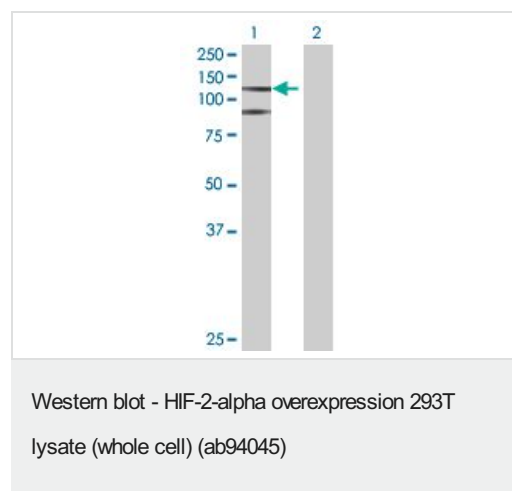
### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab94045 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		Use at an assay dependent dilution.

## Images



**All lanes :** HIF2 alpha antibody at 1/500 dilution

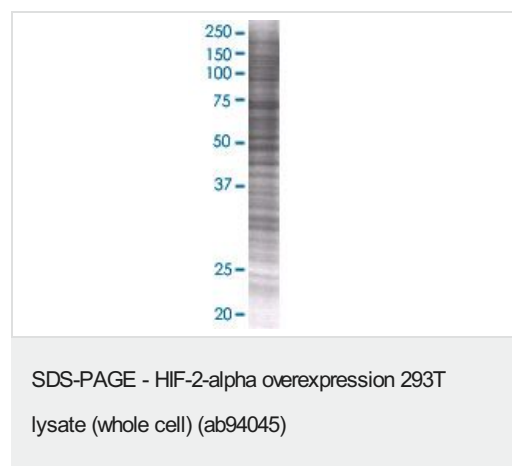
**Lane 1 :** HIF-2-alpha overexpression 293T lysate (whole cell) (ab94045)

**Lane 2 :** 293T non-transfected lysate

Lysates/proteins at 25 µg per lane.

### Secondary

**All lanes :** Goat Anti-mouse IgG (H and L) HRP conjugated at 1/2500 dilution



ab94045 at 15µg/lane on an SDS-PAGE gel

**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 <https://www.abcam.com/abpromise> or contact our technical team.

#### **Terms and conditions**

---

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