

Product datasheet

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

2 Images

Overview

Product name	HIF-2-alpha overexpression 293T lysate (whole cell)
General notes	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. Note: For more details on how the transfected lysate was prepared view preparation notes
Tested applications	Suitable for: WB

Properties

Mycoplasma free	Yes
Form	Liquid
Storage instructions	Shipped on dry ice. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Constituents: 0.01% Bromophenol blue, 2.3% Beta mercaptoethanol, 2% Sodium lauryl sulfate, 0.788% Tris HCl, 10% Glycerol (glycerin, glycerine)
Background	<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.

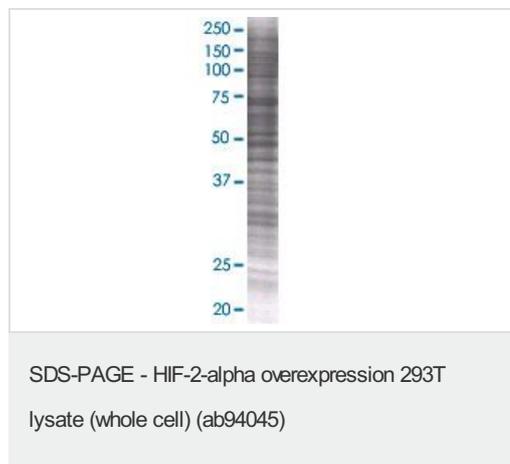
Applications

Our [Abpromise guarantee](#) covers the use of **ab94045** in the following tested applications.

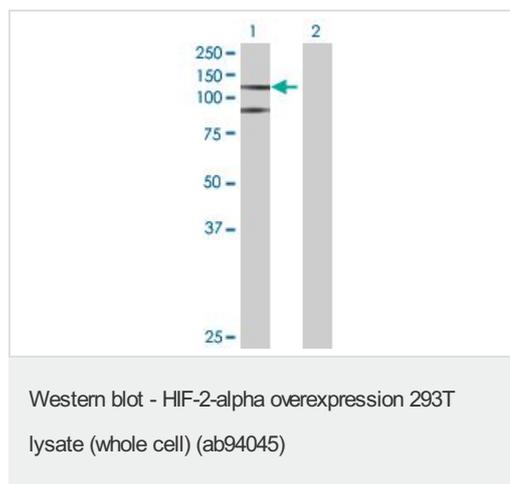
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent dilution.

Images



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



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

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