

ARG43450 anti-EPAS1 / HIF-2 alpha antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes EPAS1 / HIF-2 alpha
Tested Reactivity	Hu
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	EPAS1 / HIF-2 alpha
Species	Human
Immunogen	KLH-conjugated synthetic peptide between aa. 124-150 of Human EPAS1 / HIF-2 alpha.
Conjugation	Un-conjugated
Alternate Names	Basic-helix-loop-helix-PAS protein MOP2; HIF2A; HIF-1-alpha-like factor; HIF2-alpha; PAS domain-containing protein 2; Endothelial PAS domain-containing protein 1; HIF-2-alpha; MOP2; Hypoxia-inducible factor 2-alpha; bHLHe73; Member of PAS protein 2; ECYT4; HLF; Class E basic helix-loop-helix protein 73; PASD2; EPAS-1

Application Instructions

Application table	Application	Dilution
	FACS	1:10 - 1:50
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	
Observed Size	~ 96 kDa	

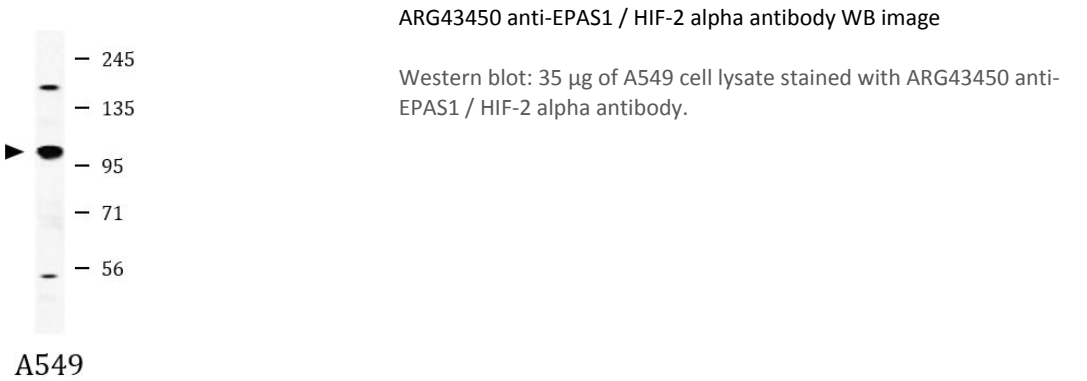
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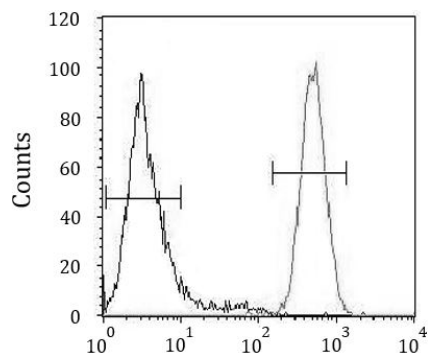
Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	EPAS1
Gene Full Name	endothelial PAS domain protein 1
Background	This gene encodes a transcription factor involved in the induction of genes regulated by oxygen, which is induced as oxygen levels fall. The encoded protein contains a basic-helix-loop-helix domain protein dimerization domain as well as a domain found in proteins in signal transduction pathways which respond to oxygen levels. Mutations in this gene are associated with erythrocytosis familial type 4. [provided by RefSeq, Nov 2009]
Function	Transcription factor involved in the induction of oxygen regulated genes. Heterodimerizes with ARNT; heterodimer binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters (By similarity). 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 requires recruitment of transcriptional coactivators such as CREBBP and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD (By similarity). [UniProt]
Calculated Mw	96 kDa
PTM	<p>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 (By similarity).</p> <p>In normoxia, is hydroxylated on Asn-847 by HIF1AN thus probably abrogating interaction with CREBBP and EP300 and preventing transcriptional activation.</p> <p>Phosphorylated on multiple sites in the CTAD.</p> <p>The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within HIF CTAD domains. [UniProt]</p>
Cellular Localization	Nucleus. Nucleus speckle. Note=Colocalizes with HIF3A in the nucleus and speckles. [UniProt]

Images





ARG43450 anti-EPAS1 / HIF-2 alpha antibody FACS image

Flow Cytometry: A549 cells stained with ARG43450 anti-EPAS1 / HIF-2 alpha antibody (right histogram) or without primary antibody as control (left histogram), followed by incubation with FITC labelled secondary antibody.