

Rabbit HIF-2-alpha/EPAS1 Polyclonal Antibody | anti-EPAS1 antibody

Anti-HIF-2-alpha/EPAS1 Antibody

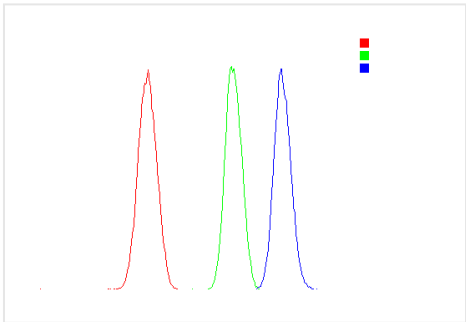
CATALOG # AAA125600	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Flow Cytometry, Functional Assay, Western Blot
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PRODUCT SYNONYMS

HIF-2-alpha/EPAS1; Polyclonal Antibody; Anti-HIF-2-alpha/EPAS1 Antibody; Endothelial PAS domain-containing protein 1; EPAS-1; Basic-helix-loop-helix-PAS protein MOP2; Class E basic helix-loop-helix protein 73; bHLHe73; HIF-1-alpha-like factor; HLF; Hypoxia-inducible factor 2-alpha; HIF-2-alpha; HIF2-alpha; Member of PAS protein 2; PAS domain-containing protein 2; endothelial PAS domain protein 1; anti-EPAS1 antibody

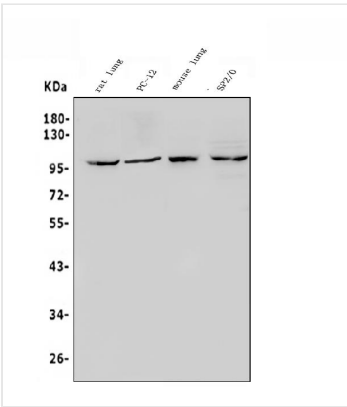
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for HIF-2-alpha/EPAS1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-EPAS1 antibody	FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human HIF-2-alpha/EPAS1 (SFEPYLLPELTRYDCEVN).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of SiHa cells using anti-HIF-2-Alpha/EPAS1 antibody (AAA125600).Overlay histogram showing SiHa cells stained with AAA125600 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HIF-2-Alpha/EPAS1 Antibody (AAA125600, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of HIF-2-Alpha/EPAS1 using anti-HIF-2-Alpha/EPAS1 antibody (AAA125600).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.Lane 1: rat lung tissue lysatesLane 2: rat PC-12 whole cell lysatesLane 3: mouse lung tissue lysatesLane 4: mouse SP2/0 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-HIF-2-Alpha/EPAS1 antigen affinity purified polyclonal antibody (Catalog # AAA125600) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HIF-2-Alpha/EPAS1 at approximately 96KD. The expected band size for HIF-2-Alpha/EPAS1 is at 96KD.

ADDITIONAL INFORMATION

Related Product Information for anti-EPAS1 antibody	HIF-2 alpha is also designated EPAS1 whose gene is mapped to 2p21-p16. The predicted mouse protein is 88% identical to human EPAS1. The human EPAS1 gene contains 15 exons and spans at least 120 kb. The positions of the introns within the genomic region encoding the N-terminal bHLH-PAS domains of EPAS1 and AHR are similar, suggesting that the 5-prime ends of the 2 genes may have arisen from a gene duplication event. Moreover, the predicted protein shares 48% sequence identity with HIF1-alpha, a bHLH-PAS transcription factor that induces EPO gene expression in cultured cells in response to hypoxia. Like HIF1A, EPAS1 binds to and activates transcription from the HIF1A response element derived from the 3-prime flanking region of the EPO gene. EPAS1 is predominantly expressed in highly vascularized tissues of adult humans and in endothelial cells of the mouse adult and embryo. Furthermore, EPAS1 may represent an important regulator of vascularization, perhaps involving the regulation of endothelial cell gene expression in response to hypoxia. HIF2A is expressed at relatively higher levels in villus sections of placenta and in lung samples compared with other tissues examined. In addition, The variation in EPAS1 influences the relative contribution of aerobic and anaerobic metabolism and hence the maximum sustainable metabolic power for a given event duration.
References	1. Tian, H.; McKnight, S. L.; Russell, D. W. : Endothelial PAS domain protein 1 (EPAS1), a transcription factor selectively expressed in endothelial cells. Genes Dev. 11: 72-82, 1997. 2. Sood, R.; Zehnder, J. L.; Druzin, M. L.; Brown, P. O. : Gene expression patterns in human placenta. Proc. Nat. Acad. Sci. 103: 5478-5483, 2006. 3. Henderson, J.; Withford-Cave, J. M.; Duffy, D. L.; Cole, S. J.; Sawyer, N. A.; Gulbin, J. P.; Hahn, A.; Trent, R. J.; Yu, B. : The EPAS1 gene influences the aerobic-anaerobic contribution in elite endurance athletes. Hum. Genet. 118: 416-423, 2005.

NCBI AND UNIPROT INFORMATION

NCBI GI #	40254439
NCBI GeneID	2034
NCBI Accession #	NP_001421.2
NCBI GenBank Nucleotide #	NM_001430.4

UniProt Accession #	Q99814; Q86VA2; Q99630
Molecular Weight	96kDa
NCBI Official Full Name	endothelial PAS domain-containing protein 1
NCBI Official Synonym Full Names	endothelial PAS domain protein 1
NCBI Official Symbol	EPAS1
NCBI Official Synonym Symbols	HLF; MOP2; ECT4; HIF2A; PASD2; bHLHe73
NCBI Protein Information	endothelial PAS domain-containing protein 1; EPAS-1; HIF2-alpha; HIF-2-alpha; HIF-1alpha-like factor; HIF-1-alpha-like factor; member of PAS protein 2; PAS domain-containing protein 2; hypoxia-inducible factor 2 alpha; hypoxia-inducible factor 2-alpha; ba
UniProt Protein Name	Endothelial PAS domain-containing protein 1
UniProt Gene Name	EPAS1
UniProt Synonym Gene Names	BHLHE73; HIF2A; MOP2; PASD2; EPAS-1; bHLHe73; HLF; HIF-2-alpha; HIF2-alpha
UniProt Entry Name	EPAS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/hif-2-alpha-epas1-antibody-flow-cytometry-western-blot-elisa/125600>