

Basic Information

Product Name	Anti-EPAS1 Antibody
Gene Name	EPAS1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human HIF-2-alpha/EPAS1, which shares 94.4% amino acid (aa) sequence identity with both mouse and rat HIF-2-alpha/EPAS1.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	96 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

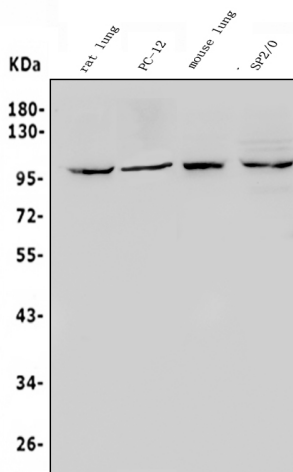
HIF-2 alpha is also designated EPAS1 whose gene is mapped to 2p21-p16. The predicted mouse protein is 88% identical to human EPAS1. The human EPAS1 gene contains 15 exons and spans at least 120 kb. The positions of the introns within the genomic region encoding the N-terminal bHLH-PAS domains of EPAS1 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.

Reference

Anti-EPAS1 Antibody被引用在1文献中。

Selected Validation Data



Western blot analysis of EPAS1 using anti-EPAS1 antibody (A01248-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

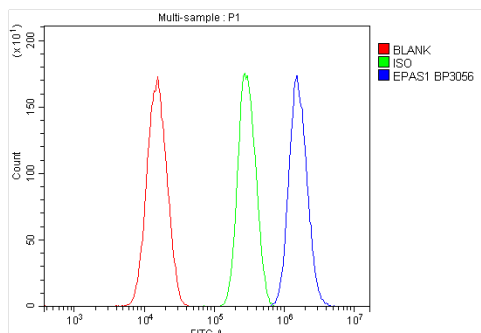
Lane 1: Rat lung tissue lysates,

Lane 2: Rat PC-12 whole cell lysates,

Lane 3: Mouse lung tissue lysates,

Lane 4: Mouse SP2/0 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-EPAS1 antigen affinity purified polyclonal antibody (A01248-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for EPAS1 at approximately 96 kDa. The expected band size for EPAS1 is at 96 kDa.



Flow Cytometry analysis of SiHa cells using anti-EPAS1 antibody (A01248-1).

Overlay histogram showing SiHa cells stained with A01248-1 (Blue line).

To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-EPAS1 Antibody (A01248-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.