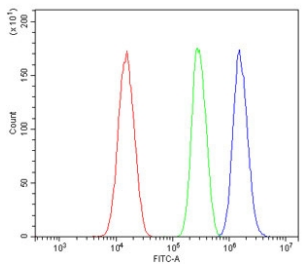
HIF2 alpha Antibody (RQ5882)

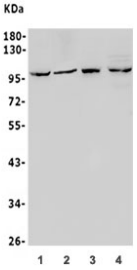
Catalog No.	Formulation	Size
RQ5882	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q99814
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This HIF2 alpha antibody is available for research use only.



Flow cytometry testing of human SiHa cells with HIF2 alpha antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= HIF2 alpha antibody.



Western blot testing of 1) rat lung, 2) rat PC-12, 3) mouse lung and 4) mouse SP2/0 lysate with HIF2 alpha antibody. Predicted molecular weight ~96 kDa.

Description

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.

Application Notes

Optimal dilution of the HIF2 alpha antibody should be determined by the researcher.

Immunogen

Amino acids SFEPYLLPELTRYDCEVN from the human protein were used as the immunogen for the HIF2 alpha antibody.

Storage

After reconstitution, the HIF2 alpha antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.