

For Research Use Only

# HIF2 $\alpha$ /EPAS1 Recombinant antibody

Catalog Number: 83790-1-RR



## Basic Information

<b>Catalog Number:</b> 83790-1-RR	<b>GenBank Accession Number:</b> BC051338	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2034	<b>CloneNo.:</b> 240736F2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q99814	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Isotype:</b> IgG	<b>Full Name:</b> endothelial PAS domain protein 1	
<b>Immunogen Catalog Number:</b> AG15199	<b>Calculated MW:</b> 96 kDa	
	<b>Observed MW:</b> 100-120 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : A549 cells, rat kidney tissue
<b>Species Specificity:</b> human, rat	

## Background Information

HIF2A, also named as EPAS1, is a 870 amino acid protein, which is expressed in most tissues, with highest levels in placenta, lung and heart. HIF2A colocalizes with HIF3A in the nucleus and speckles. HIF2A as a transcription factor involves in the induction of oxygen regulated genes. HIF2A binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. HIF2A 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. HIF2A may also play a role in the formation of the endothelium that gives rise to the blood brain barrier. The calculated molecular weight of HIF2A is 96 kDa, but In normoxia, HIF2A 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. The modified Hif2A is about 100-120 kDa.

## Storage

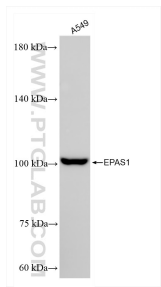
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

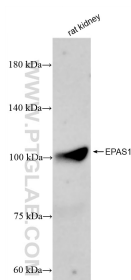
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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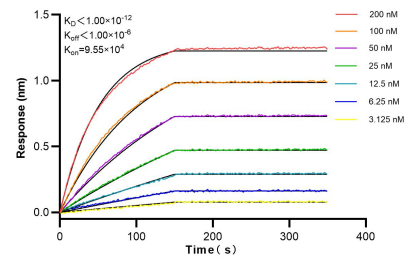
Selected Validation Data



A549 cells were subjected to SDS PAGE followed by western blot with 83790-1-RR (EPAS1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



rat kidney tissue were subjected to SDS PAGE followed by western blot with 83790-1-RR (EPAS1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 83790-1-RR against Human HIF2a/EPAS1 were performed. The affinity constant is below 1 pM.