

For Research Use Only

# HIF2 $\alpha$ /EPAS1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83790-1-PBS



## Basic Information

<b>Catalog Number:</b> 83790-1-PBS	<b>GenBank Accession Number:</b> BC051338	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2034	<b>CloneNo.:</b> 240736F2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q99814	
<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

**Tested Applications:**  
WB, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, rat

## Product Information

83790-1-PBS targets HIF2 $\alpha$ /EPAS1 as part of a matched antibody pair:

MP00775-1: 83790-4-PBS capture and 83790-1-PBS detection (validated in Cytometric bead array)

MP00775-2: 83790-2-PBS capture and 83790-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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 -80°C.

**Storage Buffer:**  
PBS Only

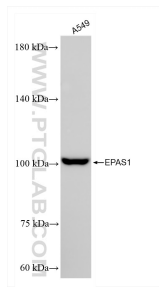
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

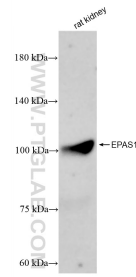
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

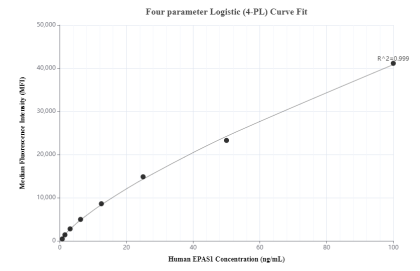
## Selected Validation Data



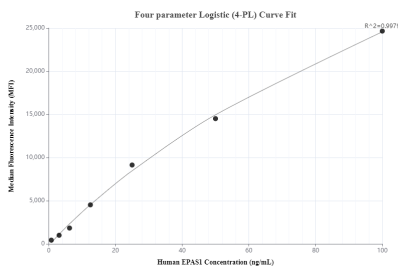
A549 cells were subjected to SDS PAGE followed by western blot with 83790-1-RR (EPAS1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83790-1-PBS in a different storage buffer formulation.



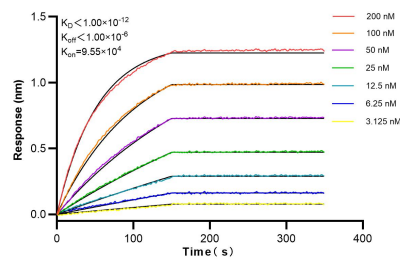
rat kidney tissue were subjected to SDS PAGE followed by western blot with 83790-1-RR (EPAS1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83790-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00775-1, HIF2 $\alpha$ /EPAS1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83790-4-PBS. Detection antibody: 83790-1-PBS. Standard: Ag15199. Range: 0.78-100 ng/mL



Cytometric bead array standard curve of MP00775-2, HIF2 $\alpha$ /EPAS1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83790-2-PBS. Detection antibody: 83790-1-PBS. Standard: Ag15199. Range: 0.78-100 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83790-1-RR against Human HIF2 $\alpha$ /EPAS1 were performed. The affinity constant is below 1 pM.