# abcam

# Product datasheet

# Anti-HIF3 alpha/IPAS antibody ab2165

3 References 1 Image

Overview

Product name Anti-HIF3 alpha/IPAS antibody

**Description** Rabbit polyclonal to HIF3 alpha/IPAS

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Mouse

Predicted to work with: Rat

Immunogen Synthetic peptide corresponding to Rabbit HIF3 alpha/IPAS aa 581-592 conjugated to keyhole

limpet haemocyanin.

Sequence:

**EIKPPKRSPRLE** 

Run BLAST with
Run BLAST with

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

1

#### **Applications**

# The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab2165 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1600. Detects a band of approximately 72 kDa (predicted molecular weight: 72 kDa).
IHC-P		Use at an assay dependent concentration. PubMed: 23451260

#### **Target**

#### **Function**

Involved in adaptive response to hypoxia. Suppresses hypoxia-inducible expression of HIF1A and EPAS1. Binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters. The complex HIF3A-ARNT activates the transcription of reporter genes driven by HRE. Isoform 4 has a dominant-negative function of inactivating HIF1A-mediated transcription. Isoform 4 attenuates the binding of HIF1A to hypoxia-responsive elements (HRE), thus inhibiting HRE-driven transcription. Hypoxia induces down-regulation of isoform 4, leading to activation of HIF1A in hypoxia. Conversely, upon restoring normoxia, the expression of isoform 4 increases and thereby secure an inhibition of HIF1A activity. Isoform 4 may be a negative regulator of hypoxia-inducible gene expression in the kidney and may be involved in renal tumorigenesis. Functions as an inhibitor of angiogenesis in the cornea.

### **Tissue specificity**

oxygen-dependent manner.

#### Sequence similarities

Contains 1 basic helix-loop-helix (bHLH) domain.

Contains 2 PAS (PER-ARNT-SIM) domains.

# Post-translational modifications

In normoxia, hydroxylated on Pro-492 in the oxygen-dependent degradation domain (ODD) by

 $PHD. \ The \ hydroxylated \ proline \ promotes \ interaction \ with \ VHL, initiating \ rapid \ ubiquitination \ and$ 

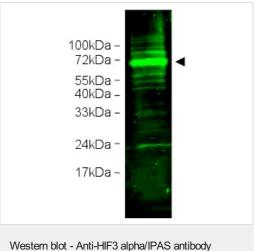
subsequent proteasomal degradation.

# Cellular localization

Nucleus. Cytoplasm. In the nuclei of all periportal and perivenous hepatocytes. In the distal

perivenous zone, detected in the cytoplasm of the hepatocytes.

#### **Images**



Western blot - Anti-HIF3 alpha/IPAS antibody (ab2165)

Anti-HIF3 alpha/IPAS antibody (ab2165) at 1/1600 dilution + 3T3 lysate treated with Cobalt (II) chloride at 10 µg/ml

### **Secondary**

Goat-anti-Rabbit at 1/10000 dilution

**Predicted band size:** 72 kDa **Observed band size:** 72 kDa

Additional bands at: 24 kDa, 55 kDa. We are unsure as to the

identity of these extra bands.

Exponentially growing 3T3 cells were treated with  $130\mu M$  CoCl<sub>2</sub> for 6 hours at 37°C to mimic hypoxia. A clear band at ~ 72kDa is detected in this lysate although some weaker background staining is also seen.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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