

## HIF-1-alpha Polyclonal Antibody | anti-HIF-1-alpha antibody

Anti-HIF-1-alpha Antibody

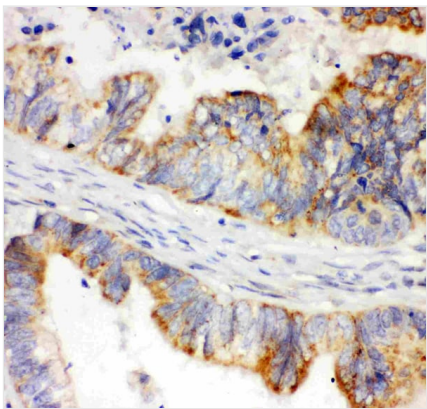
| CATALOG # | REACTIVITY        | APPLICATIONS                       |
|-----------|-------------------|------------------------------------|
| AAA46383  | Human, Mouse, Rat | Immunohistochemistry, Western Blot |

### PRODUCT SYNONYMS

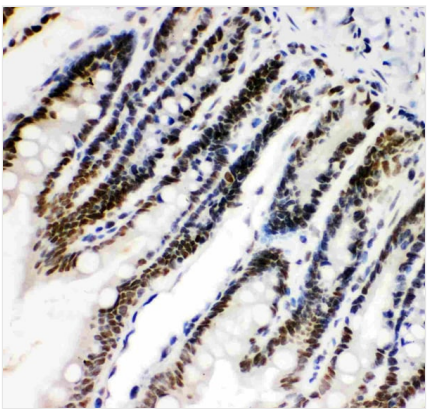
HIF-1-alpha; Polyclonal Antibody; Anti-HIF-1-alpha Antibody; Hypoxia-inducible factor 1-alpha; ARNT interacting protein; ARNT-interacting protein; Basic helix loop helix PAS protein MOP1; Basic-helix-loop-helix-PAS protein MOP1; bHLHe78; Class E basic helix-loop-helix protein 78; HIF 1A; HIF 1alpha; HIF1 A; HIF1 Alpha; HIF1; HIF1-alpha; HIF1A; HIF1A\_HUMAN; Hypoxia inducible factor 1 alpha; Hypoxia inducible factor 1 alpha isoform I.3; Hypoxia inducible factor 1 alpha subunit; Hypoxia inducible factor 1 alpha subunit basic helix loop helix transcription factor; Hypoxia inducible factor 1; alpha subunit (basic helix loop helix transcription factor); Hypoxia inducible factor1alpha; Member of PAS protein 1; Member of PAS superfamily 1; Member of the PAS Superfamily 1; MOP 1; MOP1; PAS domain-containing protein 8; PASD 8; PASD8; hypoxia inducible factor 1; alpha subunit (basic helix-loop-helix transcription factor); anti-HIF-1-alpha antibody

### PRODUCT SPECIFICATIONS

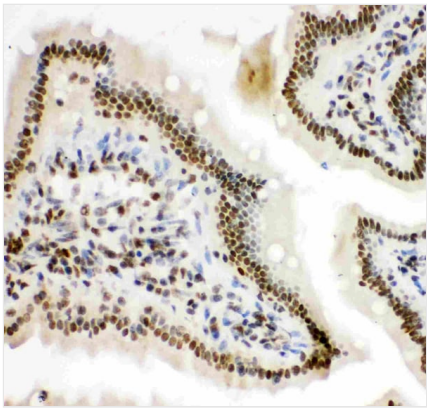
|                                                       |                                                                                                                                                                                                             |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                                            | Human, Mouse, Rat                                                                                                                                                                                           |
| Clonality                                             | Polyclonal                                                                                                                                                                                                  |
| Purity/Purification                                   | Immunogen Affinity Purified                                                                                                                                                                                 |
| Form/Format                                           | Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.                                                                                                                            |
| Sequence Length                                       | 850                                                                                                                                                                                                         |
| Applicable Applications for anti-HIF-1-alpha antibody | IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                               |
| Immunogen                                             | A synthetic peptide corresponding to a sequence at the C-terminal of human HIF-1-alpha (703-732aa EEELNPKILALQNAQRKRKMEHDGSLFQAV), different from the related mouse and rat sequences by three amino acids. |
| Ig Type                                               | Rabbit IgG                                                                                                                                                                                                  |
| Reconstitution                                        | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                        |
| Preparation and Storage                               | At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.         |



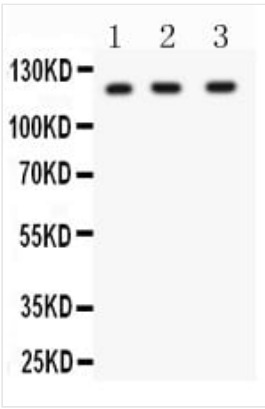
IHC (Immunohistochemistry)  
Anti- HIF 1 alpha Picoband antibody, AAA46383,IHC(P)IHC(P): Human Intestinal Cancer Tissue



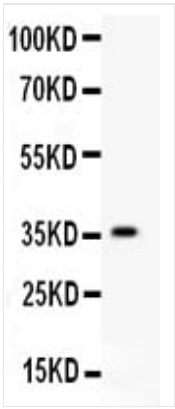
IHC (Immunohistochemistry)  
Anti- HIF 1 alpha Picoband antibody, AAA46383,IHC(P)IHC(P): Rat Intestine Tissue



IHC (Immunohistochemistry)  
Anti- HIF 1 alpha Picoband antibody, AAA46383,IHC(P)IHC(P): Mouse Intestine Tissue



WB (Western Blot)  
Anti- HIF 1 alpha Picoband antibody, AAA46383, Western blottingAll lanes: Anti HIF 1 alpha (AAA46383) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: SHG Whole Cell Lysate at 40ugLane 3: HEPA Whole Cell Lysate at 40ugPredicted bind size: 93KDObserved bind size: 120KD



WB (Western Blot)  
Anti- HIF 1 alpha Picoband antibody, AAA46383, Western blottingAll lanes: Anti HIF 1 alpha (AAA46383) at 0.5ug/mlWB: Recombinant Human HIF 1 alpha Protein 0.5ngPredicted bind size: 36KDObserved bind size: 36KD

## ADDITIONAL INFORMATION

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|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-HIF-1-alpha antibody</b> | <p>Description: Rabbit IgG polyclonal antibody for Hypoxia-inducible factor 1-alpha(HIF1A) detection. Tested with WB, IHC-P in Human;Mouse;Rat.</p> <p>Background: HIF-1alpha (Hypoxia-inducible factor 1alpha, HIF1A) is a transcription factor that mediates cellular and systemic homeostatic responses to reduced O2 availability in mammals, including angiogenesis, erythropoiesis and glycolysis. This gene was mapped to 14q21-q24. HIF-1alpha transactivate genes required for energy metabolism and tissue perfusion and is necessary for embryonic development and tumor explant growth. HIF-1alpha is over expressed during carcinogenesis, myocardial infarction and wound healing. It is crucial for the cellular response to hypoxia and is frequently over expressed in human cancers, resulting in the activation of genes essential for cell survival. HIF-1alpha regulates the survival and function in the inflammatory microenvironment directly. It is a transcription factor that plays a pivotal role in cellular adaptation to changes in oxygen availability.</p> |
| <b>References</b>                                                | <p>1. Sutter, C. H.; Laughner, E.; Semenza, G. L. : Hypoxia-inducible factor 1-alpha protein expression is controlled by oxygen-regulated ubiquitination that is disrupted by deletions and missense mutations. Proc. Nat. Acad. Sci. 97: 4748-4753, 2000. 2. Elson, D. A.; Thurston, G.; Huang, L. E.; Ginzinger, D. G.; McDonald, D. M.; Johnson, R. S.; Arbeit, J. M. : Induction of hypervascularity without leakage or inflammation in transgenic mice overexpressing hypoxia-inducible factor-1-alpha. Genes Dev. 15: 2520-2532, 2001. 3. Koshiji, M.; To, K. K.-W.; Hammer, S.; Kumamoto, K.; Harris, A. L.; Modrich, P.; Huang, L. E. : HIF-1-alpha induces genetic instability by transcriptionally downregulating MutS-alpha expression. Molec. Cell 17: 793-803, 2005. 4. Ivan, M.; Kondo, K.; Yang, H.; Kim, W.; Valiando, J.; Ohh, M.; Salic, A.; Asara, J. M.; Lane, W. S.; Kaelin, W. G., Jr. : HIF-alpha targeted for VHL-mediated destruction by proline hydroxylation: implications for O(2) sensing. Science 292: 464-468, 2001.</p>                                     |

## NCBI AND UNIPROT INFORMATION

|                                         |                                                                         |
|-----------------------------------------|-------------------------------------------------------------------------|
| <b>NCBI GI #</b>                        | 340545531                                                               |
| <b>NCBI GeneID</b>                      | 3091                                                                    |
| <b>NCBI Accession #</b>                 | NP_001230013.1                                                          |
| <b>NCBI GenBank Nucleotide #</b>        | NM_001243084.1                                                          |
| <b>UniProt Accession #</b>              | Q16665; Q53XP6; Q96PT9; Q9UPB1; C0LZJ3                                  |
| <b>Molecular Weight</b>                 | 95,634 Da                                                               |
| <b>NCBI Official Full Name</b>          | hypoxia-inducible factor 1-alpha isoform 3                              |
| <b>NCBI Official Synonym Full Names</b> | hypoxia inducible factor 1 alpha subunit                                |
| <b>NCBI Official Symbol</b>             | HIF1A                                                                   |
| <b>NCBI Official Synonym Symbols</b>    | HIF1; MOP1; PASD8; HIF-1A; bHLHe78; HIF-1alpha; HIF1-ALPHA; HIF-1-alpha |
| <b>NCBI Protein Information</b>         | hypoxia-inducible factor 1-alpha                                        |
| <b>UniProt Protein Name</b>             | Hypoxia-inducible factor 1-alpha                                        |
| <b>UniProt Gene Name</b>                | <b>HIF1A</b>                                                            |
| <b>UniProt Synonym Gene Names</b>       | BHLHE78; MOP1; PASD8; HIF-1-alpha; HIF1-alpha; bHLHe78                  |
| <b>UniProt Entry Name</b>               | HIF1A_HUMAN                                                             |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/hif-1-alpha-antibody-immunohistochemistry-western-blot-elisa/46383>