Rabbit HIF-1beta Polyclonal Antibody | anti-HIF-1beta antibody

HIF-1beta Polyclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA173732	**Rabbit**	**Human, Mouse, Rat**	**Immunohistochemistry, Western Blot**

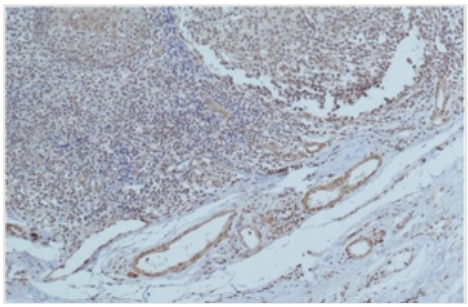
PRODUCT SYNONYMS

HIF-1beta; Polyclonal Antibody; HIF-1beta Polyclonal Antibody; ARNT; BHLHE2; Aryl hydrocarbon receptor nuclear translocator; ARNT protein; Class E basic helix-loop-helix protein 2; bHLHe2; Dioxin receptor; nuclear translocator; Hypoxia-inducible factor 1-beta; HIF-1-beta; HIF1-beta; anti-HIF-1beta antibody

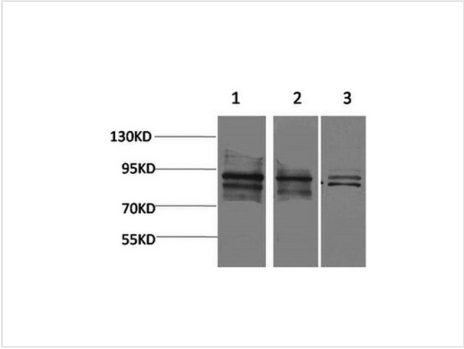
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Affinity Purification
Concentration	1mg/mL (varies by lot)
Sequence Length	773
Applicable Applications for anti-HIF-1beta antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant Protein
Buffer	PBS with 0.02% sodium azide and 50% glycerol pH 7.4.
Preparation and Storage	Store at -20 degree C. Avoid freeze / thaw cycles.

IMAGES



IHC (Immunohiostchemistry)
Immunohistochemistry of paraffin-embedded Human tonsil tissue with HIF-1beta Polyclonal Antibody.



WB (Western Blot)
Western Blot analysis of 1) MCF-7, 2) 3T3, 3) Rat brain using HIF-1beta Polyclonal Antibody at dilution of 1:20000.

ADDITIONAL INFORMATION

Related Product Information for anti-HIF-1beta antibody	Hypoxia-inducible factor 1 (HIF1) is a heterodimeric transcription factor that plays a critical role in the cellular response to hypoxia (1). The HIF1 complex consists of two subunits, HIF-1alpha and HIF-1beta, which are basic helix-loop-helix proteins of the PAS (Per, ARNT, Sim) family (2). HIF1 regulates the transcription of a broad range of genes that facilitate responses to the hypoxic environment, including genes regulating angiogenesis, erythropoiesis, cell cycle, metabolism and apoptosis. The widely expressed HIF-1alpha is typically degraded rapidly in normoxic cells by the ubiquitin/proteasomal pathway. Under normoxic conditions, HIF-1alpha is proline hydroxylated leading to a conformational change that promotes binding to the von Hippel Lindau protein (VLH) E3 ligase complex; ubiquitination and proteasomal degradation follows (3, 4). Both hypoxic conditions and chemical hydroxylase inhibitors (such as desferrioxamine and cobalt) inhibit HIF-1alpha degradation and lead to its stabilization. In addition, HIF-1alpha can be induced in an oxygen-independent manner by various cytokines through the PI3K-AKT-mTOR pathway (5-7).HIF-1beta is also known as AhR nuclear translocator (ARNT) due to its ability to partner with the aryl hydrocarbon receptor (AhR) to form a heterodimeric transcription factor complex (8). Together with AhR, HIF-1beta plays an important role in xenobiotics metabolism (8). In addition, a chromosomal translocation leading to a TEL-ARNT fusion protein is associated with acute myeloblastic leukemia (9). Studies also found that ARNT/HIF-1beta expression levels decrease significantly in pancreatic islets from patients with type 2 diabetes, suggesting that HIF-1beta plays an important role in pancreatic beta-cell function (10).

NCBI AND UNIPROT INFORMATION

NCBI GI #	309747071
NCBI GeneID	405
NCBI Accession #	NP_001184254.1
NCBI GenBank Nucleotide #	NM_001197325.1
UniProt Accession #	P27540; Q59ED4; Q5QP39; Q8NDC7; B2R9H1; C4AMA1; F8WAP6
Molecular Weight	87kDa
NCBI Official Full Name	aryl hydrocarbon receptor nuclear translocator isoform 4
NCBI Official Synonym Full Names	aryl hydrocarbon receptor nuclear translocator
NCBI Official Symbol	ARNT
NCBI Official Synonym Symbols	HIF1B; TANGO; bHLHe2; HIF1BETA; HIF-1beta; HIF1-beta; HIF-1-beta
NCBI Protein Information	aryl hydrocarbon receptor nuclear translocator
UniProt Protein Name	Aryl hydrocarbon receptor nuclear translocator
UniProt Gene Name	**ARNT**
UniProt Synonym Gene Names	BHLHE2; ARNT protein; bHLHe2; HIF-1-beta; HIF1-beta

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://www.aaabiotech.com/polyclonal/hif-1beta-antibody-immunohistochemistry-western-blot-elisa/173732