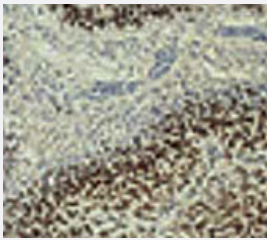


ARNT monoclonal antibody, clone H1beta234

Catalog # MAB2370 Size 100 uL

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of ARNT on human glioblastoma multi-forme using ARNT monoclonal antibody, clone H1beta234 (Cat # MAB2370).

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant ARNT.
Immunogen	Recombinant protein corresponding to amino acids 496-789 of human ARNT.
Host	Mouse
Reactivity	Bovine, Domestic ferret, Human, Mouse, Rat, Sheep
Specificity	This antibody is specific to HIF-1 beta /ARNT.
Form	Liquid
Isotype	IgG1, kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Recommend Usage	Western Blot (1:500) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide)

Storage Instruction

Store at -20°C or -80°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot
- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of ARNT on human glioblastoma multi-forme using ARNT monoclonal antibody, clone H1beta234 (Cat # MAB2370).

Gene Info — ARNT

Entrez GeneID[405](#)**Protein Accession#**[P27540](#)**Gene Name**

ARNT

Gene Alias

HIF-1beta, HIF1B, HIF1BETA, TANGO, bHLHe2

Gene Description

aryl hydrocarbon receptor nuclear translocator

Omim ID[126110](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

The aryl hydrocarbon (Ah) receptor is involved in the induction of several enzymes that participate in xenobiotic metabolism. The ligand-free, cytosolic form of the Ah receptor is complexed to heat shock protein 90. Binding of ligand, which includes dioxin and polycyclic aromatic hydrocarbons, results in translocation of the ligand-binding subunit only to the nucleus. Induction of enzymes involved in xenobiotic metabolism occurs through binding of the ligand-bound Ah receptor to xenobiotic responsive elements in the promoters of genes for these enzymes. This gene encodes a protein that forms a complex with the ligand-bound Ah receptor, and is required for receptor function. The encoded protein has also been identified as the beta subunit of a heterodimeric transcription factor, hypoxia-inducible factor 1 (HIF1). A t(1;12)(q21;p13) translocation, which results in a TEL-ARNT fusion protein, is associated with acute myeloblastic leukemia. Three alternatively spliced variants encoding different isoforms have been described for this gene. [provided by RefSeq]

Other Designations

OTTHUMP00000032943[dioxin receptor, nuclear translocator]hypoxia-inducible factor 1, beta subunit

Publication Reference

- [TLR2 controls intestinal carcinogen detoxication by CYP1A1.](#)

Do KN, Fink LN, Jensen TE, Gautier L, Parlesak A.

PLoS One 2012 Mar; 7(3):e32309.

Application: WB-Ti, Mouse, Mouse liver, small intestines

- [Antioxidants, HIF prolyl hydroxylase inhibitors or short interfering RNAs to BNIP3 or PUMA, can prevent prodeath effects of the transcriptional activator, HIF-1alpha, in a mouse hippocampal neuronal line.](#)

Aminova LR, Siddiq A, Ratan RR.

Antioxidants & Redox Signaling 2008 Dec; 10(12):1989.

Application: WB, Mouse, HT22 cells

- [Lung development in the Holtzman rat is adversely affected by gestational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin.](#)

Kransler KM, McGarrigle BP, Swartz DD, Olson JR.

Toxicological Sciences: an Official Journal of the Society of Toxicology 2009 Feb; 107(2):498.

Application: IHC-P, Rat, Rat lung

- [Topotecan inhibits vascular endothelial growth factor production and angiogenic activity induced by hypoxia in human neuroblastoma by targeting hypoxia-inducible factor-1alpha and -2alpha.](#)

Puppo M, Battaglia F, Ottaviano C, Delfino S, Ribatti D, Varesio L, Bosco MC.

Molecular Cancer Therapeutics 2008 Jul; 7(7):1974.

Application: WB-Ce, WB-Tr, Human, GI-LIN, LAN-5 cells

- [\(2R\)-\[\(4-Biphenyl\)sulfonyl\]amino\]-N-hydroxy-3-phenylpropionamide \(BiPS\), a matrix metalloprotease inhibitor, is a novel and potent activator of hypoxia-inducible factors.](#)

Lauzier MC, Robitaille GA, Chan DA, Giaccia AJ, Richard DE.

Molecular Pharmacology 2008 Apr; 74(1):282.

- [Spermidine/spermine-N1-acetyltransferase 2 is an essential component of the ubiquitin ligase complex that regulates hypoxia-inducible factor 1alpha.](#)

Baek JH, Liu YV, McDonald KR, Wesley JB, Hubbi ME, Byun H, Semenza GL.

The Journal of Biological Chemistry 2007 Aug; 282(32):23572.

Application: WB-Tr, Human, HEK 293 cells

Pathway

- [Pathways in cancer](#)
- [Renal cell carcinoma](#)

Disease

- [Abortion](#)
- [Adenocarcinoma](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Infertility](#)
- [Lung Neoplasms](#)
- [Parkinson disease](#)
- [Prediabetic State](#)
- [Prostate cancer](#)
- [Pulmonary Disease](#)
- [Thyroid Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)