

## 兔抗 ARNT 多克隆抗体

中文名称: 兔抗 ARNT 多克隆抗体

英文名称: Anti-ARNT rabbit polyclonal antibody

别名: ARNT; HIF-1beta; HIF1B; HIF1BETA; TANGO; bHLHe2

相关类别: 一抗

储存: 冷冻 (-20℃) 避光

宿主: Rabbit

抗原: ARNT

反应种属: Human, Mouse, Rat

标记物: Unconjugate

克隆类型: rabbit polyclonal

### 技术规格

**Background:**

Hypoxia-inducible factor 1 (HIF1) is a heterodimeric transcription factor that plays a critical role in the cellular response to hypoxia. The HIF1 complex consists of two subunits, HIF-1 $\alpha$  and HIF-1 $\beta$ , which are basic helix-loop-helix proteins of the PAS (Per, ARNT, Sim) family. 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-1 $\alpha$  is typically degraded rapidly in normoxic cells by the ubiquitin/proteasomal pathway. Under normoxic conditions, HIF-1 $\alpha$  is proline hydroxylated leading to a conformational change that promotes binding to the von Hippel Lindau protein

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|---------------------------------|--|
|                                 | <p>(VHL) E3 ligase complex; ubiquitination and proteasomal degradation follows. Both hypoxic conditions and chemical hydroxylase inhibitors (such as desferrioxamine and cobalt) inhibit HIF-1<math>\alpha</math> degradation and lead to its stabilization. In addition, HIF-1<math>\alpha</math> can be induced in an oxygen-independent manner by various cytokines through the PI3K-AKT-mTOR pathway. HIF-1<math>\beta</math> 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. Together with AhR, HIF-1<math>\beta</math> plays an important role in xenobiotics metabolism. In addition, a chromosomal translocation leading to a TEL-ARNT fusion protein is associated with acute myeloblastic leukemia. Studies also found that ARNT/HIF-1<math>\beta</math> expression levels decrease significantly in pancreatic islets from patients with type 2 diabetes, suggesting that HIF-1<math>\beta</math> plays an important role in pancreatic <math>\beta</math>-cell function.</p> |
| <b>Applications:</b>            | WB   |
| <b>Name of antibody:</b>        | ARNT   |
| <b>Immunogen:</b>               | Fusion protein of human ARNT   |
| <b>Full name:</b>               | aryl hydrocarbon receptor nuclear translocator   |
| <b>Synonyms :</b>               | ARNT; HIF-1beta; HIF1B; HIF1BETA; TANGO; bHLHe2  |
| <b>SwissProt:</b>               | P27540   |
| <b>WB Predicted band size:</b>  | 87 kDa   |
| <b>WB Positive control:</b>     | Hepg2, MCF7, NIH3T3, U2OS and Hela cells   |
| <b>WB Recommended dilution:</b> | 500-2000   |

