

Catalog Number:	NB100-124SS
Background:	<p>Hypoxia contributes significantly to the pathophysiology of major categories of human disease, including myocardial and cerebral ischemia, cancer, pulmonary hypertension, congenital heart disease, and chronic obstructive pulmonary disease.</p> <p>HIF-1 is a nuclear protein involved in mammalian oxygen homeostasis. This occurs as a posttranslational modification by prolyl hydroxylation. HIF-1 is a heterodimer composed of HIF-1 alpha and HIF-1 beta subunits. Both subunits are constantly translated. However, under normoxic conditions, human HIF-1 alpha is hydroxylated at Pro402 or Pro564 by a set of HIF prolyl hydroxylases, is polyubiquitinated, and eventually degraded in proteosomes. Under hypoxic conditions, the lack of hydroxylation prevents HIF degradation and increases transcriptional activity. Therefore, the concentration of HIF-1 alpha increases in the cell. In contrast, HIF-1 beta remains stable under either condition. HIF-1 beta is a series of aryl hydrocarbon receptor nuclear translocator (ARNT) gene products.</p>
Alternate Names:	anti-ARNT antibody, anti-Aryl Hydrocarbon Receptor Nuclear Translocator antibody, anti-Dioxin Receptor antibody, anti-Hypoxia Inducible Factor 1 antibody, anti-Tango antibody, anti-HIF1 beta antibody, anti-HIF1beta antibody
Research Areas:	10,348,0
Immunogen:	Fusion protein containing amino acids 496-789 of human HIF-1 beta.
Clone:	H1beta234
Isotype:	IgG1 kappa
Specificity:	This antibody is specific for HIF 1 beta /ARNT (1).
Species Reactivity:	Human, bovine, sheep, mouse, rat and ferret. Other species have not been tested.
Uses:	<p>This antibody is useful for Western blot and immunohistochemistry. By Western blot a band at approximately 92 kDa is seen.</p> <p>* Other applications have not been tested.</p>
Dilutions:	<p>Suggested working dilutions *</p> <p>Western Blot 1:500, Immunohistochemistry-Paraffin 1:100,</p> <p>* Investigator should determine optimal working dilutions.</p>
Packaging:	0.025 ml protein G purified Mouse ascites.
Concentration:	1.4 mg/ml
Buffer:	PBS
Preservative:	0.05% sodium azide
Storage:	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

Product Specific References: 1. Personal communications with G. Semenza and E. Laughner, Johns Hopkins University.

- Novus Specific References:**
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Gene Id: 405

Reference Sequence: P27540

Image(s)