

Rabbit Polyclonal anti-HIF-1 beta, Sample Size

Catalog Number:	NB100-110SS
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
Host:	Rabbit
Research Areas:	Cancer Research, Hypoxia Inducible Factors and Prolyl-Hydroxylases, Circadian Rhythm, Hypoxia IHC Tested
Immunogen:	Fusion protein to human HIF-1 beta. Containing a.a. 496-789.
Specificity:	This antibody is specific for HIF-1 beta/ARNT. It is not known if NB 100-110 Cross-reacts with ARNT2 which is related to HIF-1 beta/ARNT but is the product of a different gene.
Localization:	Nuclear
Species Reactivity:	Human, bovine, sheep, mouse, rat and ferret HIF-1 beta.
Uses:	<p>By Western blot, this antibody recognizes a band at ~92 kDa representing HIF-1 beta in induced tissues and cells.</p> <p>Background non-specific bands are minimal on MCF7 human nuclear extracts. Background may increase with whole cell extract preparations.</p> <p>The investigator should determine the optimal working dilution for a specific application. MCF7 human nuclear extracts, lower dilutions may be needed for whole cell extract preps</p> <p>* Other applications have not been tested.</p>
Dilutions:	<p>Suggested working dilutions *</p> <p>immunohistochemistry 1:150 ,</p> <p>Western Blot 1/2000</p> <p>* Investigator should determine optimal working dilutions.</p>
Positive Controls:	<p>MCF7 human nuclear extracts</p> <p>* MCF-7 Whole Cell Lysate NB820-59465</p>

- Packaging:** 0.025 ml Whole Rabbit antisera.
- Preservative:** 0.02% sodium azide
- Storage:** Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
- Limitations:** This product is for research use only and is not approved for use in humans or in clinical diagnosis. This product is guaranteed for 6 months from date of receipt.

- Novus Specific References:**
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Gene Id: 405
Gene System: ARNT
Reference Sequence: P27540