

Catalog Number:	NB100-2529SS
Background:	Hypoxia-inducible factor (HIF) is one of the most important factors in the cellular response to hypoxia, transcriptionally activating genes encoding proteins that mediate adaptive responses to reduced oxygen availability. HIF is a heterodimer consisting of one of three subunits, HIF1 alpha, HIF2 alpha, or HIF3 alpha. HIF target genes play critical roles in metabolism, angiogenesis, cell proliferation and cell survival. HIF3 alpha protein is one of several alpha/beta-subunit heterodimeric transcription factors that regulate many adaptive responses to low oxygen tension (hypoxia). The alpha 3 subunit lacks the transactivation domain found in factors containing either the alpha 1 or alpha 2 subunits. HIF3 alpha may be a marker for tumor growth and angiogenesis.
Alternate Names:	anti-HIF3 alpha antibody, anti-Hypoxia Inducible Factor 3 alpha antibody, anti-Hypoxia inducible factor three alpha antibody, anti-Inhibitory PAS domain protein antibody
Research Areas:	10,31,348,0
Immunogen:	A synthetic peptide made to an internal region of the human HIF-3 alpha (within residues 250-350). [Swiss-Prot# Q66K72]
Specificity:	This antibody is specific for HIF-3 alpha.
Species Reactivity:	Recognizes human and mouse HIF-3 alpha. Other species have not been tested.
Uses:	May be used in Western analysis where it recognizes a band at ~68 kDa representing HIF-3 alpha. Because a band at ~71 kDa is also seen in hypoxic samples, it is important to run a negative control lysate, as well (see image). Not tested in any other application. Suggested working dilution:* Western Blot - 1:500-1:1,000 *The investigator should determine the optimal working dilution for a specific application. * Other applications have not been tested.
Dilutions:	Suggested working dilutions * immunohistochemistry , immunoprecipitation , Western Blot * Investigator should determine optimal working dilutions.
Positive Controls:	NB800-PC26
Packaging:	0.025ml IgG purified Rabbit antisera.
Concentration:	24 mg/ml
Buffer:	PBS
Preservative:	0.02% sodium azide
Storage:	Store at 4C. Do not freeze.



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Novus Specific References:

1. Wade, K. C., Guttentag, S. H., Gonzales, L. W., Maschhoff, K. L., Gonzales, J., Kolla, V., Singhal, S., and Ballard, P. L. (2006) Gene Induction during Differentiation of Human Pulmonary Type II Cells In Vitro, 34, 727-737.
2. Forooghian, F., et al. Hypoxia-inducible factor expression in human RPE cells. Br J Ophthalmol. 91: 1406-1410, 2007.

General References:

1. Gu YZ, Moran SM, Hogenesch JB, Wartman L, Bradfield CA. Molecular characterization and chromosomal localization of a third alpha-class hypoxia inducible factor subunit, HIF3 alpha. Gene Expr. 1998;7(3):205-13.

Gene Id: 64344

Reference Sequence: Q9Y2N7

Image(s)