

Product datasheet for **TA301442**

HIF1 beta (ARNT) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ChIP, ICC/IF, IHC, Immunoblotting, IP, Simple Western, WB
Recommended Dilution:	Immunohistochemistry: 1:150, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation: 1:10-1:500, Western Blot: 1:2000, Immunohistochemistry-Paraffin: 1:150, Simple Western: 1:1000, Gel Supershift Assay, Chromatin Immunoprecipitation (ChIP): 1:10-1:500, Immunoblotting
Reactivity:	Human, Bovine, Mouse, Rat, Sheep, Ferret
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein to human HIF-1 beta. Containing a.a. 496-789.
Formulation:	0.02% sodium azide
Purification:	Whole antisera
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	aryl hydrocarbon receptor nuclear translocator
Database Link:	NP_001659 Entrez Gene 11863 Mouse Entrez Gene 25242 Rat Entrez Gene 405 Human P27540



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Background:

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. 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. (1,5,6)

Synonyms:

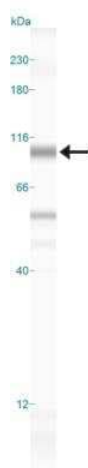
bHLHe2; HIF-1-beta; HIF-1beta; HIF1-beta; HIF1B; HIF1BETA; TANGO

Protein Families:

Druggable Genome, Transcription Factors

Protein Pathways:

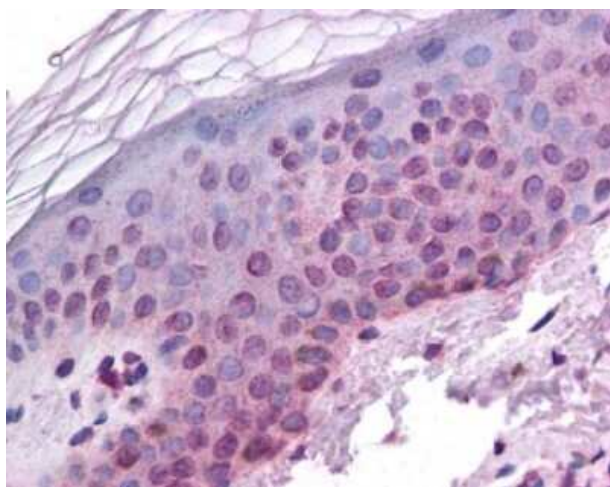
Pathways in cancer, Renal cell carcinoma

Product images:

Simple Western: ARNT/HIF-1 beta Antibody TA301442 - Simple Western analysis using ARNT/HIF-1 beta antibody TA301442. Lane view shows a specific band for HIF-1 beta in 0.5 mg/ml of Hypoxic HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. Theoretical molecular weight is 86.6 kDa. Observed molecular weight ~106 kDa.



Western Blot: ARNT/HIF-1 beta Antibody TA301442 - Analysis of HIF-1 beta using ARNT/HIF-1 beta antibody TA301442 in MCF7 whole cell lysate. Theoretical molecular weight is 86.6 kDa. Observed molecular weight ~95 kDa.



Immunohistochemistry: ARNT/HIF-1 beta Antibody TA301442 - Immunohistochemical staining of human skin epidermis with ARNT/HIF-1 beta antibody TA301442.