

## Product datasheet for **TA501149S**

### HIF1 beta (ARNT) Mouse Monoclonal Antibody [Clone ID: OTI1F4]

#### Product data:

|                         |  |
|-------------------------|--|
| Product Type:           | Primary Antibodies   |
| Clone Name:             | OTI1F4   |
| Applications:           | IF, IHC, WB  |
| Recommended Dilution:   | WB 1:2000, IHC 1:50, IF 1:100  |
| Reactivity:             | Human, Mouse, Rat  |
| Host:                   | Mouse  |
| Isotype:                | IgG1   |
| Clonality:              | Monoclonal   |
| Immunogen:              | Full length human recombinant protein of human ARNT (NP_001659) produced in HEK293T cell.  |
| Formulation:            | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.   |
| Concentration:          | 0.5 mg/ml  |
| Purification:           | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)  |
| Conjugation:            | Unconjugated   |
| Storage:                | Store at -20°C as received.  |
| Stability:              | Stable for 12 months from date of receipt.   |
| Predicted Protein Size: | 86.5 kDa   |
| Gene Name:              | aryl hydrocarbon receptor nuclear translocator   |
| Database Link:          | <a href="#">NP_001659</a><br><a href="#">Entrez Gene 11863 Mouse</a> <a href="#">Entrez Gene 25242 Rat</a> <a href="#">Entrez Gene 405 Human</a><br><a href="#">P27540</a> |



[View online »](#)

**Background:**

The aryl hydrocarbon (Ah) receptor is involved in the induction of several enzymes that participate in xenobiotic metabolism. The ligand-free, cytosolic form of the Ah receptor is complexed to heat shock protein 90. Binding of ligand, which includes dioxin and polycyclic aromatic hydrocarbons, results in translocation of the ligand-binding subunit only to the nucleus. Induction of enzymes involved in xenobiotic metabolism occurs through binding of the ligand-bound Ah receptor to xenobiotic responsive elements in the promoters of genes for these enzymes. This gene encodes a protein that forms a complex with the ligand-bound Ah receptor, and is required for receptor function. The encoded protein has also been identified as the beta subunit of a heterodimeric transcription factor, hypoxia-inducible factor 1 (HIF1). A t(1;12)(q21;p13) translocation, which results in a TEL-ARNT fusion protein, is associated with acute myeloblastic leukemia. Three alternatively spliced variants encoding different isoforms have been described for this gene.

**Synonyms:**

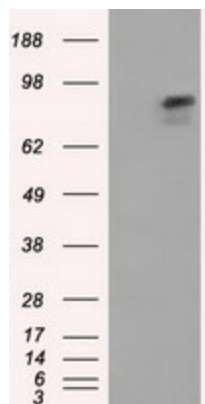
bHLHe2; HIF-1-beta; HIF-1beta; HIF1-beta; HIF1B; HIF1BETA; TANGO

**Protein Families:**

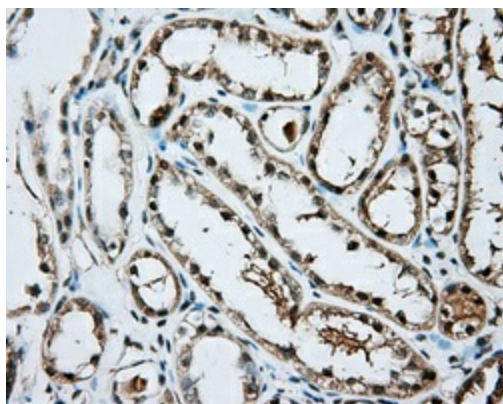
Druggable Genome, Transcription Factors

**Protein Pathways:**

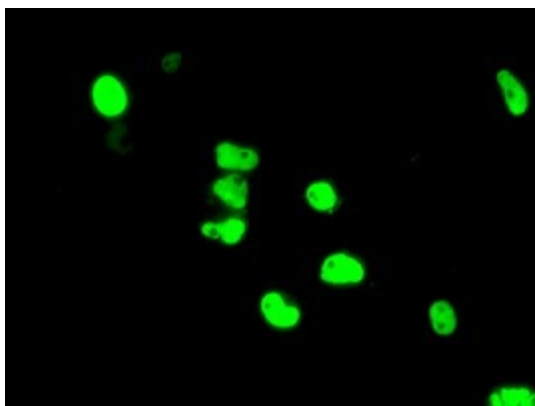
Pathways in cancer, Renal cell carcinoma

**Product images:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ARNT ([RC216724], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ARNT. Positive lysates [LY400636] (100ug) and [LC400636] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffin-embedded Kidney tissue within the normal limits using anti-ARNT mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501149], Dilution 1:50)



Anti-ARNT mouse monoclonal antibody ([TA501149]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ARNT ([RC216724]).