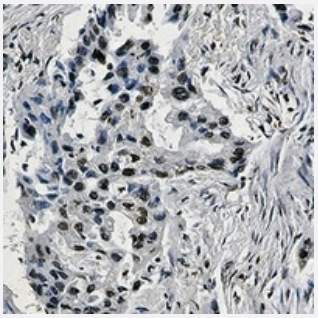
RecomAb™ Sm Size

# ARNT recombinant monoclonal antibody

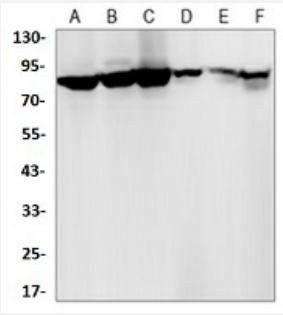
Catalog # RAB09260 Size 50 uL

## Applications



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human lung cancer formalin fixed paraffin embedded tissue section using ARNT recombinant monoclonal antibody (Cat # RAB09260). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.96). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.




### Western Blot (Cell lysate)

Western blot analysis of Raw264.7 (A), NIH3T3 (B), Hela (C), CHOK1 (D), C6 (E), Ramos (F) whole cell lysates with ARNT recombinant monoclonal antibody (Cat # RAB09260).

## Specification

| | |
|---|---|
| **Product Description** | Rabbit recombinant monoclonal antibody raised against human ARNT. |
| **Antibody Species** | Rabbit |
| **Immunogen** | Original antibody is raised against recombinant protein of human ARNT. |
| **Theoretical MW (kDa)** | 87 |
| **Reactivity** | Hamster, Human, Mouse, Rat |

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|---|---|
| **Specificity** | Recognizes endogenous levels of HIF1 beta protein. |
| **Form** | Liquid |
| **Preparation Method** | Mammalian cell (HEK293) expression system |
| **Purification** | Immunogen affinity chromatography |
| **Isotype** | IgG |
| **Recommend Usage** | Immunohistochemistry (1:50-1:100)<br>Western Blot (1:500-1:1000) |
| **Storage Buffer** | In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA) |
| **Storage Instruction** | Store at 4°C short term.<br>Aliquot and store at -20°C long term.<br>Avoid freeze-thaw cycles. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

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## Gene Info — ARNT

| | |
|---|---|
| **Entrez GeneID** | 405 |
| **Protein Accession#** | P27540 |
| **Gene Name** | ARNT |
| **Gene Alias** | HIF-1beta, HIF1B, HIF1BETA, TANGO, bHLHe2 |
| **Gene Description** | aryl hydrocarbon receptor nuclear translocator |

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| | |
|---|---|
| **Omim ID** | 126110 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | 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, r esults in translocation of the ligand-binding subunit only to the nucleus. Induction of enzymes involv ed 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 t hat 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 fact or, hypoxia-inducible factor 1 (HIF1). A t(1;12)(q21;p13) translocation, which results in a TEL-ARN T fusion protein, is associated with acute myeloblastic leukemia. Three alternatively spliced varian ts encoding different isoforms have been described for this gene. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000032943\|dioxin receptor, nuclear translocator\|hypoxia-inducible factor 1, beta su bunit |

## Pathway

- Pathways in cancer
- Renal cell carcinoma

## Disease

- Abortion
- Adenocarcinoma
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Diabetes Mellitus
- Edema
- Endometriosis
- Esophageal Neoplasms
- Genetic Predisposition to Disease

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- Infertility
- Lung Neoplasms
- Parkinson disease
- Prediabetic State
- Prostate cancer
- Pulmonary Disease
- Thyroid Neoplasms
- Urinary Bladder Neoplasms
- Werner syndrome

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