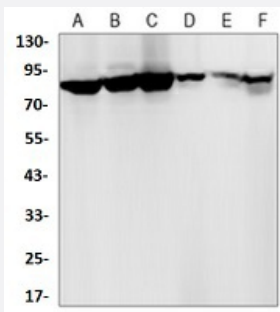


RecomAb™

# ARNT recombinant monoclonal antibody

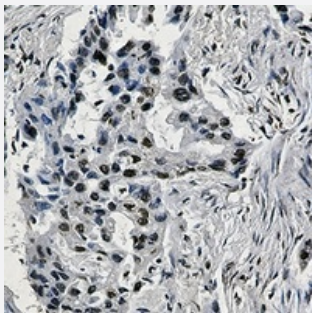
Catalog # RAB02591      Size 100 uL

## Applications



### 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 # RAB02591).



### 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 # RAB02591). 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.

## 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

Specificity	Recognizes endogenous levels of HIF1 beta protein.
Form	Liquid
Purification	Immunogen affinity chromatography
Isotype	IgG
Recommend Usage	Immunohistochemistry (1:50-1:100) 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. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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## Gene Info — ARNT

Entrez GeneID	<a href="#">405</a>
Protein Accession#	<a href="#">P27540</a>
Gene Name	ARNT
Gene Alias	HIF-1beta, HIF1B, HIF1BETA, TANGO, bHLHe2
Gene Description	aryl hydrocarbon receptor nuclear translocator
Omim ID	<a href="#">126110</a>

## 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, 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. [provided by RefSeq]

## Other Designations

OTTHUMP00000032943[dioxin receptor, nuclear translocator]hypoxia-inducible factor 1, beta subunit

## 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](#)
- [Infertility](#)

- [Lung Neoplasms](#)
- [Parkinson disease](#)
- [Prediabetic State](#)
- [Prostate cancer](#)
- [Pulmonary Disease](#)
- [Thyroid Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)