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ARNT (aa558-570) Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF3670a

Specification

ARNT (aa558-570) Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	P27540
Other Accession	NP_001659.1, NP_848514.1, NP_001184254.1, 405
Reactivity	**Human**
Predicted	**Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**86636**

ARNT (aa558-570) Antibody (internal region) - Additional Information

Gene ID 405

Other Names
Aryl hydrocarbon receptor nuclear translocator, ARNT protein, Class E basic helix-loop-helix protein 2, bHLHe2, Dioxin receptor, nuclear translocator, Hypoxia-inducible factor 1-beta, HIF-1-beta, HIF1-beta, ARNT, BHLHE2

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ARNT (aa558-570) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ARNT (aa558-570) Antibody (internal region) - Protein Information

Name ARNT (HGNC:700)

Synonyms BHLHE2

Function
Required for activity of the AHR. Upon ligand binding, AHR translocates into the nucleus, where it heterodimerizes with ARNT and induces transcription by binding to xenobiotic response elements

(XRE). Not required for the ligand-binding subunit to translocate from the cytosol to the nucleus after ligand binding (PubMed:34521881). The complex initiates transcription of genes involved in the regulation of a variety of biological processes, including angiogenesis, hematopoiesis, drug and lipid metabolism, cell motility and immune modulation (Probable). The heterodimer binds to core DNA sequence 5'- TACGTG-3' within the hypoxia response element (HRE) of target gene promoters and functions as a transcriptional regulator of the adaptive response to hypoxia (By similarity). The heterodimer ARNT:AHR binds to core DNA sequence 5'-TGCGTG-3' within the dioxin response element (DRE) of target gene promoters and activates their transcription (PubMed:28396409).

Cellular Location
Nucleus.

ARNT (aa558-570) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ARNT (aa558-570) Antibody (internal region) - Images

AF3670a (1 µg/ml) staining of HeLa nuclear lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

ARNT (aa558-570) Antibody (internal region) - Background

This antibody is expected to recognize all reported isoforms (NP_001659.1; NP_848514.1; NP_001184254.1).

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ARNT (aa558-570) Antibody (internal region) - References

ETV6-ARNT fusion in a patient with childhood T lymphoblastic
leukemia. Otsubo K, Kanegane H, Eguchi M, Eguchi-Ishimae M, Tamura K, Nomura K, Abe A, Ishii E, Miyawaki T. Cancer Genet Cytogenet. 2010 Oct 1;202(1):22-6. PMID: 20804916