

Recombinant Human ARNT, His-tagged

Cat. No. ARNT-3648H Lot. No. (See product label)

SPECIFICATION

Product Overview Aryl hydrocarbon receptor nuclear translocator (ARNT)

Species Human

Source E.Coli/Yeast

ProteinLength 773

Description

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. A t(1;12)(q21;p13) translocation, which results in a TEL-ARNT fusion protein, is associated with acute myeloblastic leukemia. Alternative splicing results in multiple transcript variants.

Form

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	>90%
Notes	Small volumes of ARNT recombinant protein may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container's cap. Certain products may require to ship with dry ice.
Storage	Store at -20 degree C. For extended storage, store at -20 or -80 degree C.
Storage Buffer	PBS pH 7.4, 50% glycerol
Warning	This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GENE INFORMATION

Gene Name	ARNT aryl hydrocarbon receptor nuclear translocator [Homo sapiens]
Official Symbol	ARNT
Synonyms	ARNT; aryl hydrocarbon receptor nuclear translocator; bHLHe2; HIF 1beta; dioxin receptor, nuclear translocator; class E basic helix-loop-helix protein 2; hypoxia-inducible factor 1, beta subunit; HIF1B; TANGO; HIF1BETA; HIF-1beta; HIF1-beta; HIF-1-beta;
Gene ID	405
mRNA Refseq	NM_001197325
Protein Refseq	NP_001184254

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MIM	126110
UniProt ID	P27540
Chromosome Location	1q21
Pathway	Angiogenesis, organism-specific biosystem; HIF-1-alpha transcription factor network, organism-specific biosystem; HIF-2-alpha transcription factor network, organism-specific biosystem; Hypoxic and oxygen homeostasis regulation of HIF-1-alpha, organism-spe
Function	aryl hydrocarbon receptor activity; aryl hydrocarbon receptor binding; protein binding; protein heterodimerization activity; contributes_to sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; contributes_to sequence-specific distal enhancer binding RNA polymerase II transcription factor activity; signal transducer activity; transcription coactivator activity; transcription factor binding;

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