

Recombinant Human ARNT protein, His-tagged

Cat. No. ARNT-33H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ARNT(aa 1-474) fused with His tag was expressed in Yeast.
Species	Human
Source	Yeast
ProteinLength	1-474 a.a.
Description	This gene encodes a protein containing a basic helix-loop-helix domain and two characteristic PAS domains along with a PAC domain. The encoded protein binds to ligand-bound aryl hydrocarbon receptor and aids in the movement of this complex to the nucleus, where it promotes the expression of genes involved in xenobiotic metabolism. This protein is also a co-factor for transcriptional regulation by hypoxia-inducible factor 1. Chromosomal translocation of this locus with the ETV6 (ets variant 6) gene on chromosome 12 have been described in leukemias. Alternative splicing results in multiple transcript variants.
Form	20 mM Tris, pH 8.0, 500 mM NaCl, 50% glycerol
Molecular Mass	54.83 kD
AA Sequence	MAATTANPEM TSDVPSLGPA IASGNSGPGI QGGGAIVQRAIKRRPGLDFD DDGEGNSKFL RCDDDQMSND KERFARSDDEQSSADKERLA RENHSEIERR RRNKMTAYIT ELSDMVPTCS ALARKPDKLT ILRMAVSHMK SLRGTGNTST DGSYKPSFLTDQELKHLILE

 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

AADGFLFIVS CETGRVVYVS DSVTPVLNQPQSEWFGSTLY DQVHPDDVDK
 LREQLSTSEN ALTGRILDLK
 TGTVKKEGQQ SSMRMCMGSR RSFICRMRCG SSSVDPVSVNRLSFVRNRCR
 NGLGSVKDGE PHFVVVHCTG YIKAWPPAGVSLPDDDPEAG QGSKFCLVAI
 GRLQVTSSPN CTDMSNVCQP
 TEFISRHNIE GIFTFVDHRC VATVGYQPQE LLGKNIVEFCHPEDQQLLRD
 SFQQVVKLKG QVLSVMFRFR SKNQEWLWMRTSSFTFQNPY SDEIEYIIC
 NTNKVNSSQE PRPT

Storage Long term: -80 centigrade; Short term: -20 centigrade. Avoid freeze-thaw cycles.

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_001668](#)

Protein Refseq [NP_001659](#)

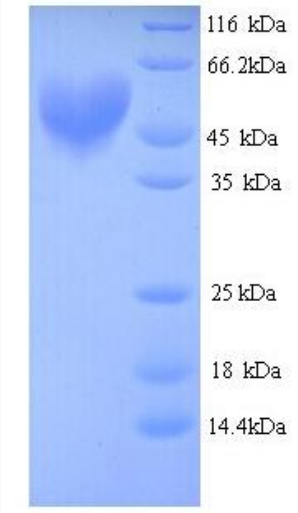
MIM [126110](#)

UniProt ID [P27540](#)

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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-specific biosystem; Notch-mediated HES/HEY network, organism-specific biosystem; Pathways in cancer, organism-specific biosystem; Renal cell carcinoma, organism-specific biosystem;
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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