



# Recombinant Human Aryl hydrocarbon receptor nuclear translocator (ARNT)

<b>Product Code</b>	CSB-EP002121HU-B
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P27540
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	MAATTANPEMTSDVPSLGPALASGNSGPGIQGGGAIVQRAIKRRPGLDFDDDG EGNSKFLRCDDDDQMSNDKERFARSDDEQSSADKERLARENHSEIERRRRNK MTAYITELSDMVPTCSALARKPKDKLTILRMAVSHMKSLRGTGNTSTDGSYKPS FLTDQELKHLILEAADGFLFIVSCETGRVVYVSDSVTPVLNQPQSEWFGSTLYD QVHPDDVDKLRQLSTSENALTGRILDKLTGTVKKEGQQSSMRMCMGSRRSF ICRMRCGSSSDPVSVNRLSFVRNRCRNLGSLVDGEPHFVVHCTGYIKAW PPAGVSLPDDDPEAGQGSKFCLVAIGRLQVTSSPNCTDMSNVCQPTEFISRH NIEGIFTFVDHRCVATVGYQPQELLGKNIVEFCHPEDQQLLRDSFQQVVKLKG QVLSVMFRFRSKNQEWLWMRTSSFTFQNPYSDEIEYIICTNTNVKNSSQEPRP T
<b>Source</b>	E.coli
<b>Target Names</b>	ARNT
<b>Protein Names</b>	Recommended name: Aryl hydrocarbon receptor nuclear translocator Short name= ARNT protein Alternative name(s): Class E basic helix-loop-helix protein 2 Short name= bHLHe2 Dioxin receptor, nuclear translocator Hypoxia-inducibl
<b>Expression Region</b>	1-474aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Partial
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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