



Recombinant Human Aryl hydrocarbon receptor nuclear translocator (ARNT), partial

Product Code	CSB-YP002121HU
Relevance	Required for activity of the Ah (dioxin) receptor. This protein is required for the ligand-binding subunit to translocate from the cytosol to the nucleus after ligand binding. The complex then initiates transcription of genes involved in the activation of PAH procarcinogens. The heterodimer with HIF1A or EPAS1/HIF2A functions as a transcriptional regulator of the adaptive response to hypoxia.
Abbreviation	Recombinant Human ARNT protein, partial
Storage	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.
Uniprot No.	P27540
Alias	Class E basic helix-loop-helix protein 2 ;bHLHe2Dioxin receptor, nuclear translocatorHypoxia-inducible factor 1-beta ;HIF-1-beta ;HIF1-beta
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MAATTANPEMTSDVPSLGPAIASGNSGPGIQGGGAIVQRAIKRRPGLDFDDDG EGNSKFLRCDDDDQMSNDKERFARSDDEQSSADKERLARENHSEIERRRRNK MTAYITELSDMVPTCSALARKPKDKLTILRMAVSHMKSRLGTGNTSTDGSYKPS FLTDQELKHLILEAADGFLFIVSCETGRVYVSDSVTPVLNQPPQSEWFGSTLYD QVHPDDVDKLRQLSTSENALTGRILDLKTGTVKKEGQQSSMRMCMGSRRSF ICRMRCGSSSVDPVSVNRLSFVRNRCRNLGSGVKDGEHPHFVVHCTGYIKAW PPAGVSLPDDDDPEAGQGSKFCLVAIGRLQVTSSPNCTDMSNVCQPTEFISRH NIEGIFTFVDHRCVATVGYQPQELLGKNIVEFCHPEDQQLLRDSFQQVVKLKG QVLSVMFRFRSKNQEWLWMRTSSFTFQNPYSDEIEYIICTNTNVKNSSQEPRP T
Research Area	Others
Source	Yeast
Target Names	ARNT
Protein Names	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
Expression Region	1-474aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.



Tag Info N-terminal 6xHis-tagged

Mol. Weight 54.8kDa

Protein Length Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Expand your research capabilities in molecular biology with our high-quality Recombinant Human ARNT protein. The Aryl hydrocarbon receptor nuclear translocator (ARNT) plays a crucial role in the adaptive response to environmental stress and xenobiotics. By forming a heterodimer with other bHLH-PAS proteins, ARNT mediates the regulation of gene transcription in response to diverse environmental signals, including hypoxia and aromatic hydrocarbons.

Derived from yeast expression systems, our recombinant ARNT protein encompasses a partial 1-474aa region, carefully designed to provide you with the highest level of experimental performance. The N-terminal 6xHis-tag enables efficient protein purification, while the exceptional purity (>90% as determined by SDS-PAGE) ensures optimal results in your experiments. Supplied as a lyophilized powder, our Recombinant Human ARNT protein is primed to bolster your molecular biology research.

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.

Shelf Life

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.