

Product datasheet for **MR227373**

Arnt (NM_009709) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arnt (NM_009709) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Arnt
Synonyms:	bHLHe2; D3Ertd557e; Drnt; ESTM42; Hif1b; mKIAA4051; W08714
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR227373 representing NM_009709
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGCGACTACAGCTAACCCAGAAATGACATCAGATGTACCATCGCTGGGTCCACCATTGCTTCTG
 GAAACCCCTGGACCTGGGATTCAAGGTGGAGGAGCTGTTGTACAGAGGGCTATTAAGCGACCGTCAGGGCT
 GGATTTTATGATGAAAGTGAAGTGAACACTAAATTTTTGAGATGCGATGATGACCAGATGTGTAATGAC
 AAAGAGCGGTTTCCAGGGAAAATCATAGTGAATAGAACGGCGCGACGGAACAAGATGACAGCTTACA
 TCACAGAACTGTCAGACATGGTACCTACATGTAGTGCCCTGGCTCGAAAACCAGACAAGCTAACCATCTT
 ACGCATGGCCGTTTCTCACATGAAGTCTTGAGGGAACTGGCAACACATCTACTGATGGCTCTACAAG
 CCATCTTCTCACTGATCAGGAACTGAAACATTTGATCTTGAGGCAGCAGATGGCTTTCTGTTTATTG
 TCTCCTGTGAGACTGGACGGTGGTGTATGTCTCTGACTCAGTACTCCCGTTTTGAACCAGCCACAGTC
 TGATGGTTCCGGAGCACACTGTATGATCAGGTGCACCCAGATGATGTGGATAAACTTCGAGAGCAGCTC
 TCTACATCAGAAAATGCCCTAACAGGGCGGGTCCCTGGATCTGAAGACTGGAACAGTGAAAAGGAAGGCC
 AGCAGTCTTCCATGAGGATGTGCATGGGCTCACGAAGGTCGTTTCACTGCGCCATGAGGTGTGGTACTAG
 CTCCTGGACCTGTTTCCATGAATAGACTGAGCTTTTTGAGGAACAGATGCAGGAATGGGCTTGGCTCT
 GTGAAGGAAGGAGAACCTCACTTTGTGGTAGTCCACTGCACAGGCTACATCAAGGCTGGCCACCAGCAG
 GTGTCTCCCTCCCAGATGATGACCCAGAGGCTGGCCAGGGGAGCAAAATTCGCCTAGTGGCCATTGGCAG
 GCTGCAGGTAAGTCTCCCAACTGTACAGACATGAGTAACATTTGTCAGCCAACAGATTTACTCTCC
 CGACACAACATTGAAGGGATATTCATTTTGTAGACCATCGTTGTGTGGTACTGTTGGCTACCAGCCAC
 AGGAGCTTTAGGGAAGAATATTGTAATTTTGTATCCTCTGAAGACCAACAACCTCTAAGAGACAGCTT
 TCAGCAGGTGGTAAAATTAAGGTCAGGTGCTGTCCGTCATGTTCCGATTCCGATCTAAGACCCGAGAA
 TGGCTGTGGATGAGAACGAGCTCCTTTACCTTCCAAAACCCTTATTGATGAAATTGAGTATATTACT
 GCACCAACACCAATGTGAAGAACTCTAGCCAGGAACCACGGCCTACACTGTCCAACACCATCCCAAGGTC
 ACAGCTAGGTCCGACAGCCAATTTATCCCTAGAGATGGGTACAGGGCAGCTGCCATCCAGGCAGCAGCAG
 CAGCAGCACACAGAACTGGATATGGTACCAGGAAGAGATGGGCTGGCCAGCTATAATCATTCCCAGGTTT
 CTGTCCAGCCTGTGGCAAGTGCAGGATCAGAACACAGCAAGCCCTTGAGAAGTCAGAAGGTCTCTTTGC
 ACAGGACAGAGATCCAAGTTTCCAGAAATCTATCCCAGCATCACTGCAGATCAGAGTAAAGGCATCTCC
 TCCAGCACTGTCCCTGCCACCAACAGCTGTTCTCCCAGGGCAGCTCATTCCCTCCTAACCCCGGCCGG
 CAGAGAATTTAGGAATAGTGGTCTTACCCTCCTGTAACCATTGTCCAGCCATCATCTTCTGCAGGGCA
 GATACTGGCCAGATTTACGTCCTCAACCTGCCAGGGATCAGCGCCGACCTGGACCTCTAGCTCC
 CGCCAGGCTTTGCCGCCAGCAGGTGCCACCCAGGCTACAGCCAAGACTCGTTCTTCCCAATTTGGTG
 TGAACAACTTTAGACTTCTTCTCCTTCAAGTGTATGTCTTCCGGGTGCTCCCACTGCCTCATCTGG
 TACTGTGCCTACCCTGCTCTCCCAACCGTGGCTCCAATTTCTCCTGAGACTGGACAGACCACAGGA
 CAGTTCAGGCCCGGACAGCAGAGGGCGTGGGTGTCTGGCCACAGTGGCAGGGCCAGCAGCCCCATCATC
 GGTCTAGTTCAGTGAGCAGCATGTTTCAAGCAGACAAGCACAAGCACCTAGCCAGCCTGAGGTCTTTCA
 AGAAATGCTGTCCATGCTGGGAGACCAAGCAACACCTACAACAATGAAGAATTTCTGATCTAACTATG
 TTTCCCCCTTTTCCGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227373 representing NM_009709
 Red=Cloning site Green=Tags(s)

MAATTANPEMTSDVPSLGPTIASGNPQGGIQQGGAVVQRAIKRRSGLDFDDEVEVNTKFLRCDDQMCND
 KERFARENHSEIERRRRNKMTAYITELSDMVPTCSALARKPKLTILRMVSHMKSLRGTGNTSTDGSYK
 PSFLTQELKHLILEAADGFLFIVSCETGRVVYVSDSVTPVLNQPQSEWFGSTLYDQVHPDDVDKLRQL
 STSENALTRVLDLKTGTVKKEGQQSSMRMCMGSRSSFICRMRCGTSSVDPVSMNRLSFLRNRCRNLGS
 VKEGEPHFVVVHCTGYIKAWPPAGVSLPDDPEAGQGSKFCLVAIGRLQVTSSPNCIDMSNICQPTFIS
 RHNIEGIFTFVDHRCVATVGYQPQELLGKNIVEFCHPEDQQLLRDSFQQVVKLKGQVLSVMFRFRSKTRE
 WLWMRTSSFTFQNPYSDEIEYIICTNTNVKNSSQEPRTLNTIPRSQLGPTANLSLEMGTGQLPSRQQQ
 QQHTELDMPGRDGLASYNHSQVSVQPVASAGSEHSKPLEKSEGLFAQDRDPRFPEIYPSITADQSKGIS
 SSTVPATQQLFSQGSFPPNRPAPENFRNSGLTPPVTVIQPSSSAGQILAQISRHSNPAQGSAPTWTSSS
 RPFQAAQQVPTQATAKTRSSQFVNNFQTSSSFAMSLPGAPTASSGTAAYPALPNRGSNFPETGQTTG
 QFQARTAEGVGVWPQWQGGQPHRSSSSEQHVQQTQAQAPSQPEVFQEMLSMLGDQSNTYNNEEFPDLTM
 FPPFSE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_009709.4](#), [NP_033839.2](#)

RefSeq Size: 4325 bp

RefSeq ORF: 2331 bp

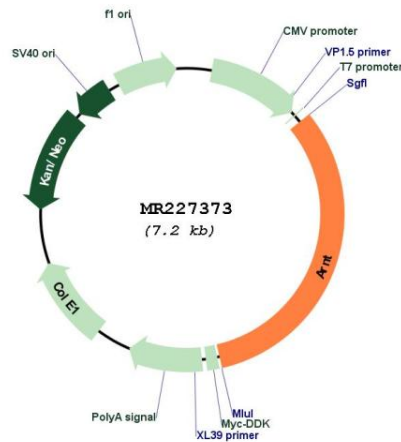
Locus ID: 11863

Cytogenetics: 3 40.74 cM

MW: 85.7 kDa

Gene Summary: 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 (By similarity). 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 (PubMed:26245371, PubMed:27782878). 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:28602820). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227373