

Product datasheet for **MC205717**

Arnt (NM_001037737) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arnt (NM_001037737) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Arnt
Synonyms:	bHLHe2; D3Erttd557e; Drnt; ESTM42; Hif1b; mKIAA4051; W08714
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC012870
 GCGGCGGTAAGGTGCCTAATCTGCGGAGTGGCTCTTCCCTCCCCAGCTCGGTGGCGGCTGCCCC
 TCCCACCGAGGGTGGCGCAGGGACGGTGCCATCTCGACCATGGCGGCGACTACAGCTAACCCAGAAATGA
 CATCAGATGTACCATCGCTGGTCCCACCATGCTTCTGGAAACCTGGACTGGGATCAAGGTGGAGG
 AGCTGTTGTACAGAGGGCTATTAAGCGACGGTCAGGGCTGGATTTTGTATGATGAAGTGAAGTGAACACT
 AAATTTTGTAGATGCGATGATGACCAGATGTGTAATGACAAAGAGCGGTTTGCCAGGTCCGATGATGAGC
 AGAGCTGCGGATAAAGAGAGACTTGCCAGGGAAAAATCATAGTAAAATAGAACGGCGGGACGGAAACAA
 GATGACAGCTTACATCACAGAAGTGTGACAGATGGTACCTACATGTAGTGCCTGGCTCGAAAACAGAC
 AAGCTAACCATCTTACGCATGGCCGTTTTCTCACATGAAGTCCTTGAGGGGAACTGGCAACACATCTACTG
 ATGGCTCTACAAGCCATCTTCCCTCACTGATCAGGAACTGAAACATTTGATCTTGAGGCGCAGCAGATGG
 CTTTCTGTTTATTGTCTCCTGTGAGACTGGACGGGTGGTGTATGTCTCTGACTCAGTACTCCCCTTTG
 AACCCAGCCACAGTCTGAATGGTTCGGGAGCACACTGTATGATCAGGTGCACCCAGATGATGTGGATAAAC
 TTCGAGAGCAGCTCTACATCAGAAAATGCCCTAACAGGGCGGGTCTGGATCTGAAGACTGGAACAGT
 GAAAAAGGAAGGCCAGCAGTCTCCATGAGGATGTGCATGGGCTCACGAAGGTCGTTTCATCTGCCGCATG
 AGGTGTGGTACTAGCTCCGTGGACCCTGTTCCATGAATAGACTGAGCTTTTTGAGGAACAGATGCAGGA
 ATGGGCTTGGCTCTGTGAAGGAAGGAGAACCTCACTTTGTGGTAGTCCACTGCACAGGCTACATCAAGGC
 CTGGCCACCAGCAGGTGTCTCCCTCCCAGATGATGACCCAGAGGCTGGCCAGGGGAGCAAATTTGCCTA
 GTGGCCATTGGCAGGCTGCAGGTAAGTCTTCCCAACTGTACAGACATGAGTAACATTTGTCAGCCAA
 CAGAGTTCATCTCCCACACAACATTGAAGGGATATTCACCTTTGTAGACCATCGTTGTGTGGTACTGT
 TGGCTACCAGCCACAGGAGCTCTTAGGGAAGAATATTGTAGAATTTGTCATCCTGAAGACCAACAACCT
 CTAAGAGACAGCTTTAGCAGGTGGTGAATTTAAAGGTGAGGTGCTGTCCGTCATGTTCCGATTCGGAT
 CTAAGACCCGAGAATGGCTGTGGATGAGAACGAGCTCCTTACCTTCCAAAACCTTATTCAGATGAAAT
 TGAGTATATTATCTGCACCAACACCAATGTGAAGAACTAGCCAGGAACCACGGCCTACTGTCCAAC
 ACCATCCCAAGGTACAGCTAGGTCCGACAGCCAATTTATCCCTAGAGATGGGTACAGGGCAGCTGCCAT
 CCAGGCAGCAGCAGCAGCAGCACAGAACTGGATATGGTACCAGGAAGAGATGGGCTGGCCAGCTATAA
 TCATTCCAGGTTTCTGTCCAGCCTGTGGCAAGTGCAGGATCAGAACACAGCAAGCCCTTGAGAAGTCA
 GAAGGTCTCTTTGCACAGGACAGAGATCCAAGGTTTCCAGAAATCTATCCAGCATCACTGCAGATCAGA
 GTAAAGGCATCTCCTCCAGCACTGTCCCTGCCACCAACAGCTGTTCTCCAGGGCAGCTCATTCCCTCC
 TAACCCCGGCCGCGCAGAGAATTCAGGAATAGTGGTCTTACCCCTCTGTAACCATTGTCCAGCCATCA
 TCTTCTGCAGGGCAGATACTGGCCAGATTTACGTCACTCCAACCTGCCAGGGATCAGCGCCGACCT
 GGACCTTAGCTCCCGCCAGGCTTTGCCGCCAGCAGGTGCCACCCAGGCTACAGCCAAGACTCGTTC
 TTCCCAATTTGGTGTGAACAATTTAGACTTCTTCTCCTTTCAGTGCTATGTCTTCCGGGTGCTCCC
 ACTGCCTCATCTGGTACTGCTGCCTACCCTGCTCTCCCAACCGTGGCTCCAATTTCTCCTGAGACTG
 GACAGACCACAGGACAGTTCAGGCCCGGACAGCAGAGGGCGTGGGTGTCTGGCCACAGTGGCAGGGCCA
 GCAGCCCCATCATCGGTCTAGTTCAGTGAGCAGCATGTTTCAGCAGACACAAGCAACAAGCACCTAGCCAG
 CCTGAGGTCTTTCAAGAAATGCTGTCCATGCTGGGAGACCAAGCAACACCTACAACAATGAAGAATTTT
 CTGATCTAACTATGTTTCCCCCTTTTCCGAATAGAATATTGGGGTGAAGATAAGGGTGGGGGAAATC
 ACTGTTTGTTTTTAAAGCAAATCTTTGTAAACAGAATAAAAGTTCCTCTCCCTTCCCTTCCCTCACCC
 CTGATATGTACCCTTTCCACCCCTTGACTTGTGAAGAAACGTTATAGAAGAAATTAATGAATTTCCCA
 GGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_001037737

Insert Size: 2376 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">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:	<u>BC012870</u> , <u>AAH12870</u>
RefSeq Size:	2691 bp
RefSeq ORF:	2376 bp
Locus ID:	11863
UniProt ID:	<u>P53762</u>
Cytogenetics:	3 40.74 cM
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) is the longer transcript and encodes the longer isoform (a).</p>