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Product datasheet for SC215504

Arg 3.1 (ARC) (NM_015193) Human 3' UTR Clone

Product data:

Product Type:	3' UTR Clones
Product Name:	Arg 3.1 (ARC) (NM_015193) Human 3' UTR Clone
Symbol:	Arg 3.1
Synonyms:	Arg3.1; hArc
Mammalian Cell Selection:	Neomycin
Vector:	pMirTarget (PS100062)
ACCN:	NM_015193
Insert Size:	1581 bp

View online »

Insert Sequence:

>SC215504 3'UTR clone of NM_015193
The sequence shown below is from the reference sequence of NM_015193. The complete sequence of this clone may contain minor differences, such as SNPs.
Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
GTGGCCAGTGACCGGACCCAGCCCGAGTAGAGGGCATCCCGGAGCCCCCAGCCTGCCCACTACATCCAG
CCTGTGGCTTTGCCCACCAGGACTTTTGAGCTGGGGCTGACTCCTGCAGGGGAAGCCCTGGTCCAGCTG
GGTGCCCCCTCGAGCTCCGGGCGGACTCGCACACACTCGTGTCATCCAGATGTGAGCACCGCACCCAGC
GGCAAAGAGCCCTCCCCCCTGCAGGGCTCCACCCATCACCCTCCCTCCGTCTGTCTTTCCGGCCTGGAC
CCCACCCTCCACACTCTCAGGCCATCACAGAACACCCCAGCTTCCTCATTCTGCTACAACACCCAGGCC
CTCTGGACATCCAGAAAACCAAGTGTCCGGATGGCAGGGGCCAGCGGCCACCAAGCTCATGGGACACCC
AGAGCAGAAGCTAGGGCAGAGCCAATGCTGAGGGAGCCTCGACTTCCGGCGCCGCCGCCCTCTCCCGGC
ATCCGCAGAGCCAGCTGACGCCCTCCCTGCCTCCCAGGGCAGCTGGCCAGCCTCGGGCAGCGCGGCCCC
CTCCTCCCAGGGGAGAGTAGAAGTCGCACACGCAGCAGAGCAGACCTGATGTCCCGGTGCTTCCTGGCC
CCTCAGCTCCAGTGATTCACGCCCGCCTGGAGAAGAATCAGAGCTCAGCTCATGACTCACCCATGGCAG
GCGGAGGGTCCCAGAGGGGCTGAGTCCTCAAATCCGGCTGAGGCAGCAGCTGGCACCATCAGAGCCAGG
AGAGTGACAACAGGTCTCAAGGTTCCCACAAAGTCTTTGCTGCTGTGCTGGGCACCACCCACCCCTCAC
CTTGCAGGCTGCCTGCGTGGGAGGCGAAGTCCCAGGACAGCCCAGAGGGGGGCTACAGAGAGGAGTCGG
CTGCAGCAGAGGGCAGGAGCCCCAGCTTAGCCCTGAGCGCCAGCGCGAGGACCAGGGCCTGCCACTAAG
CCCGCCCCGCTGGCCGCCAGCTGCCCGTCCCCAGAGCCACTGCAGCAGGAGTCGGGCCCTGCCTCCCTC
CCAGCAGGGAAACCCCGCCCGCTGCCAGGCCATCCTCTCTGCCAGAGGCTTTCATGAGCCCCAAGGCTG
GGGCCACAGCTCCTACCCCTGCCCAGCAGCCCTGAGCTCAGCTGCAGGAAGGACATCCCAGAAGCCATG
GCTCCTGGGGCGCTTCCAGGCATTCTGCCCTGCCCCGACACCAGAACCCTGGTGCTGGTGGGCCACTAG
CGTCTGCAGCCTAAGCAGGTGCTGGCTCAGGGTTCATCGTTCTGCCTTGTCCACTGGGGGACCAGCCCT
GCAGACCACTCTGACAAGTCTTCAGCCCACACCCTGCCAGCCCCACAGATTTTATTTTTGCACATAAGC
CATAACCAATCCTCAAGGCTGGCACAGGCTTTGGGGAAGCCCTGGAGCCTGTGAAGACCCTGGAAACCT
CATGAGGCTGTGGCCAACCCCTGCCCCTTGCCCCACACAGACCAGGCCTTAAATGTCGGTCCAGGCCCT
GTGCACCTTACCCCAGAGACAGACTCTTTTTGTAAGATTTTGTTAATAAAACACTGAAACTTC
ACGCGTAAGCGGCCGCGGCATCTAGATTCGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: SgfI-MluI

OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences , e.g., single nucleotide polymorphisms (SNPs).

Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

RefSeq: NM_015193.5

Summary: Master regulator of synaptic plasticity that self-assembles into virion-like capsids that encapsulate RNAs and mediate intercellular RNA transfer in the nervous system. ARC protein is released from neurons in extracellular vesicles that mediate the transfer of ARC mRNA into new target cells, where ARC mRNA can undergo activity-dependent translation. ARC capsids are endocytosed and are able to transfer ARC mRNA into the cytoplasm of neurons. Acts as a key regulator of synaptic plasticity: required for protein synthesis-dependent forms of long-term potentiation (LTP) and depression (LTD) and for the formation of long-term memory. Regulates synaptic plasticity by promoting endocytosis of AMPA receptors (AMPARs) in response to synaptic activity: this endocytic pathway maintains levels of surface AMPARs in response to chronic changes in neuronal activity through synaptic scaling, thereby contributing to neuronal homeostasis. Acts as a postsynaptic mediator of activity-dependent synapse elimination in the developing cerebellum by mediating elimination of surplus climbing fiber synapses. Accumulates at weaker synapses, probably to prevent their undesired enhancement. This suggests that ARC-containing virion-like capsids may be required to eliminate synaptic material. Required to transduce experience into long-lasting changes in visual cortex plasticity and for long-term memory (By similarity). Involved in postsynaptic trafficking and processing of amyloid-beta A4 (APP) via interaction with PSEN1 (By similarity). In addition to its role in synapses, also involved in the regulation of the immune system: specifically expressed in skin-migratory dendritic cells and regulates fast dendritic cell migration, thereby regulating T-cell activation (By similarity).[UniProtKB/Swiss-Prot Function]

Locus ID: 23237

MW: 56.3