

Product datasheet for MR214151

Arid1b (NM_001085355) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arid1b (NM_001085355) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Arid1b
Synonyms:	8030481M12; 9330189K18Rik; AI836955; Ardi1b; B230217J03Rik; mKIAA1235
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR214151 representing NM_001085355, codon optimized . Due to the complexity of NM_001085355, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGAGACTGGCCTGCTGCCTAACCACAAGCTGAAAGCCGTGGGCGAGGCCCCAGCAGCCCCCGCATC
AGCAGCATCACCACCATCATGCCACCACCACCATCACCATCACGCTCACCATCTCCACCACCTGCATCA
CCACCAGCTCTGCAACAGCAGCTGAACCAATTCAGCAGCCACAGCCTCCGCAACCTCAGCAGCAGCAG
CCCCCCCCCTCCCCTCAGCAGCAGCACCACAGCCAACAATAGTCTGGGCGGAGCAGGTGGAGGTGCC
CTCAACCCGGTCCAGACATGGAGCAGCCACAGCATGGTGGCGCAAAGATTCTGTGGCTGGCAACCAGGC
AGATCCTCAGGGTCAGCCACTGCTCAGCAAGCCGGGAGATGAGGATGACGCACCACCGAAGATGGGCGAA
CCTGCCGATCCCCTACGAGCACCCAGGCCTCGGCGCCAGCAGCAGCCCGCCTGTAGCTGTGCCAG
GGGGGGAGGTGGCCCTGCCGCTGTTCCGAGTTCAACAATTATTATGGGTCCGCTGCACCCGCATCCGG
GGCCCCGGGGGGCGCGCTGGTCCATGCTTCGATCAGCATGGAGGCCAGCAGTCACCTGGCATGGGAATG
ATGCACAGTGCATCTGCTGCAGCGGGCGCTCCTCAAGCATGGATCCCCTCCAAAACCTCCATGAAGGAT
ACCCTAATAGCCAGTATAACCACTATCCAGGATACAGTAGGCCAGGAGCCGGAGGAGCGGTGGAGGCGG
CGGGGGAGGCGGTGGATCTGGCGGTGGAGGCGCGGTGGTGGAGCCGGCGGGGCCGGCGCAGCGGT
GCTGCTGCTGGCGCCGAGCTGTGGCCGAGCAGCGGTGCCCGCTGCTGCAGCCGAGCTGCTGGCG
GAGGGGTGGCGCGGCTATGGATCATCTTCATCTGGCTATGGGGTTCTCTTCTCTAGGCAGCAAGG
CGGAGGGATGATGATGGGCGGGCGGAGGGGGGCGAGCGTCCCTGAGCAAGGCAGCTGCCGGGGCCGA
GCTGCTGCAGCGGTTTCCAGCGGTTTGTGGTCAAGAATCAGCATCCGAGCGGAGCCACCCGACTCTGA



[View online >](#)

ATCAGCTCCTCACTTCTCCTAGCCCTATGATGCGCAGCTACGGTGGTTCTTACCCCGACTACAGTTCCTC
 ATCTGCCCCACCTCCACCTAGCCAACCACAGAGTCAGGCCGACAGCTGGAGCGGCCCTGGCGGACAGCAG
 GCGGCCGTGGCATGGGCTGGGTAAGGACTTGGGTGCCAGTACGCCGTGTTCTCCAGCATGGGCCG
 CAGCCCAGCAGCGGTACACCCTGCGATGTCCCAAGCACCCAGGCCCTACCATGGGTGCTCTCAGGG
 TTCTCCCATGGACCCCATGGTATGAAGCGGCCGAGCTCTATGGTATGGGCACTCACCTCATTCCCAA
 CCCCAGCAGTCTTACCATAACCTGGCGGTTCTTACGGCCCCCGGGGCTCAGCGCTATCCCCTGGAA
 TGCAGGGTCGAGCGCTGGGGCTCTCGGGCCCTGCAATACCTCAGCAGCAGATGCCACCCGACGACGG
 CCAACAGGCTGTGAGTGATACTGTGAGCAGGGGACAGCAGCCGTAATAATCAGCAGCCGACGCAAGT
 CACCTCCCTCCCCAGGCCAGTATCTTCAACCTGCAGCCGCGAGTACAGCAGCGATACCAACCTCAGC
 AGGACATGTCCCAGGAGGATATGGAACCTCGGAGCCAACCACCCCTCGCACCAGGCAAGTCAAACCATGA
 AGATTTGAACCTGATCCAGCAGGAGCGACCTAGTAGTCTGCCTGACCTGTCTGGCAGCATCGACGACCTC
 CCCACCGGCACTGAGGCAACCCTGTCTTACAGTGTGTGAGCTTCCGGGAGCACCTCTTCTCAGGGCGACC
 AGTCCAACCCGGTCAATCTCCATTTTCCCTCATGCGTCCCACTTGTCTCAATACCCGGGGTCC
 CTCTCAAAGCCAGTCGGTTCTCCGGTGGGGTCAAACCAGAGCCGGAGTGGTCCCATTTACCTGCAAGT
 ATCCCCGTAGCCAGATGCCTCCACAGCCACCCGGCAGCCAGAGCGAGTCCAGCAGCCACCCCGCTTT
 CTCAGTCCCCTATGCCGCAAGAGCGCGGTTTCATGACAGGAACCAACGCAATCCTCAGATGAGCCAGTA
 TGGGCCCCAACAGACCGGTCCATCTATGTCCCCACATCCATCTCCTGGAGGCCAGATGCATCCAGGAATC
 AGCAACTTCCAACAGTCTAACTCATCAGGGACCTACGGCCCCAGATGAGCCAGTACGGCCCCAGGGCA
 ATTATTCTCGGACACCCACCTACAGCGGTGTCCCGAGTGCAGCTATAGCGGGCCCGGTCTGGCATGGG
 GATCAACGCAAATAATCAAATGCACGGCCAGGGTCCCAGCCAGCCCTGCGGGGCCATGCCCTGGGGCGC
 ATGCCCTCCGCTGGAATGCAGAAATAGGCCATTCCAGGGACCATGTCAAGCGTACACCCAGTTCCTCTG
 GCATGTCCAGCAAGGCCGAGCAGGCATGGGCCACCTATGCCTACTGTAACCCGCAAAGCTCAGGAGGC
 TGCCCGCGGGTATATGCAGGCCGCTGCTAACTCCGCCAACTAGACAGGGTAGTTTCCCGGGCATGAAT
 CAGTCTGGCCTGGTTGCCAGTAGTTCCTCCACTCCAGTCCATGAACAACAACAGCTCTCTGATGAGTA
 CACAGGCAACAACATACTCCATGACCCCACTATGGTGAACAGTTCCTACTGCCTCTATGGCTTGGCCGA
 CATGATGTCCCCTTCCGAATCCAACTGTCCGTGCCTCTGAAGGCCGATGGCAAGGAAGAAGGCGTCAGT
 CAGCCAGAGAGCAAATCTAAAGATTCTTACGGGAGTACGGGCATCAGCCAGCCCCCTACACCTGGCAACT
 TGCCCGTTCTAGCCCCATGTCACCTTCAAGTGAAGCATTTCAGTTTTACGGGGATGAGTCCGACTC
 TATAAGCTCTCCCGTTGGCCAAAACCCCATCCAGCCCCAAAAGTAGTAGCTCCAGCACCACCGGTGAA
 AAGATAACAAAAGTCTACGAACGGGAACGAGCCAGAGCGAAAGCTCTGGTTCGATCGATACTTGACGT
 TCATGGAGGAGAGGGCAGTCCAGTGTCCAGTCTCCAGCCGTTGAAAGAAGCCCTTGACCTGTTTTCG
 CCTCTACGTCTGTGTTAAAGAAATCGGGCCGCTGGCACAGGTGAACAAAATAAAGAAGTGGAGGGAGTTG
 GCAACAAATCTGAATGTTGGGACATCATATCCGCGGCCAGTCTATTGAAGAAGCAATACATTCAATACC
 TCTTCCGTTTGAATGTAACAAACGAAAGGGGCGAGGAGCCACCACCTGAGGTGTTTTCTACCGGCGATT
 TAAGAAGCAGCCGAAGCTCAACCCCGTCCCCGCAATAGCGGCAGTCTGCAGGGGCCAGACCCCT
 CAGTCCACCGCTCTAATAGTATGGCGGAGTCCCGGAGATCTTAAGCCACCAACCCAGCCTCTACGC
 CACATGGCCAAATGACCCCATGCAGAGTGGCAGGTCAACCGGTGTCGTTTACGACCCCTTTTCTGA
 TGTGTCCGATAGTGATACCCCAAGCGGAACCAATGACCCCAACGCTCCTTACCAGCAGGGAATGGGA
 ATGCCTGACATGATGGGAGGATGCCATATGAGCCGAACAAGACCCTTCTCAGGTATGAGGAAGGTGC
 CTGGCAGTCCGAGCCATTTATGACACAGGGACAGGTGCCAAACTCCGGAATGCAGGACATGTATAACCA
 GAGCCATCCGGAGCAATGTCCAATCTGGGAATGGGCCAAAGGCAGCAATCCCCCTACGGTACCTCATA
 GACCGACGGCATGAAGCTTACGGACAGCAGTACCTGGCCAAGGGCCACCCACAGGACAACCACCTATG
 GCGGTACCAACAGGCCTTACCCCCAGCAGCCGAACTACAAACGGCACATGGACGGAATGTACGGGCC
 GCCAGCCAAGAGGCACGAGGGAGATATGTACAACATGCAGTATGGAAGCCAGCAACAAGAGATGTACAAT
 CAATATGGTGGCTCCTATTCCGGACCCGACAGGCGACCAATCCAGGGACAGTATCCGTACCCATATAACA
 GAGAGCGCATGCAGGGGCTGGGCAGATGCAGCCCCACGGAATCCCCCTCAGATGATGGTGGGCCAAT
 GCAAAGCTCCTCAAGTGAAGGGGCCAGCAGAACATGTGGCCACACGGAATGATATGCCGTATCCCTAT
 CAGTCAAGACAGGGCCCAGGCGGCCAGCAAGCACCACCATATCCAGGTATGAATAGGACTGACGACA
 TGATGGTTCCCGAGCAACGAATCAATCACGAGTCTCAGTGGCCATCTCATGTAAGTCAGCGGCAGCCTTA
 CATGTCTTCTCCGCTAGCATGCAGCCAATCACTAGGCCGCTCAGTCTAGTTATCAGACCCCTCCATCC
 CTGCTAATCATATCAGCAGGGCTCCTAGCCCCGCTCTTTTACGCGAAGCCTGGAGTCTAGAATGTCTC
 CAAGCAAGTCACCGTTTCTCCAACTATGAAGATGCAGAAAGTATGCCTACAGTGCCTACATCTCAGGT

GACAGGCCCTCCTCCACAACCACCACCGATTCCGCCGGGAGATTACCTTTCCCCAGGCAGCGTCGAAGCA
TCCCAGCCTATTCTCAAGCAACGGCGGAAGATTACAAGTAAGGACATTGTCAACCCCGAGGCATGGCGCG
TAATGATGTCCCTTAAATCAGGGCTGCTCGCGGAGAGCACATGGGCCCTTGACACTATTAATATCCTGCT
GTATGATGATAGTACAGTGGCCACTTTCAACCTGTCTCAATTGTCCGGTTCCTTGAGCTCCTGGTTGAG
TATTTCCGAAAGTGTCTGATCGATATTTTCGGCATCCTGATGGAATACGAAGTTGGTGACCCCTCCCAGA
AGGCTCTCGACCACAGGTCCGGTAAAAAGGACGACTCACAGAGCCTGGAGGATGACTCAGGTAAGGAGGA
CGACGACGCAGAGTGTCTGGTGGAGGAAGAAGAAGAGGAGGAGGAGGAAGAAGAGGACTCCGAAAAATC
GAGTCCGAGGGAAAGTCCAGTCCCTGCTCTGGCCGCTCCCGACGCTTCCGTGGATCCCAAAGAGACTCCCA
AGCAAGCTTCTAAATTCGACAAACTGCCTATTAAGATCGTGAAGAAAAACAACTGTTTGTGTGGACAG
ATCCGATAAACTCGGTAGGGTTCAAGAGTTTTCTCCGGCCTGCTGCACTGGCAGCTGGGTGGCGGTGAT
ACAACCTGAGCACATCCAACTCATTTTGAAGTAAGATGGAAATCCCTCCACGACGCAGACCACCACCTC
CGCTGTCTTCCACAGGAAAAAGAAAGAGTTGGAGGAAAGGGGATTCCGAAGAACAGCCCGAAAAAGAG
CATTATTGCCACAATTGACGATGTCTTCTGCTAGGCCGGGAGCTCTGCCTGAGGACACAAATCCAGGC
CCTCAGACCGACAGCGGAAGTCCCATTTGGCATCCAGCAGGCTAAGAGTACCAGGAATATTGCCTGCTG
TTGAAGATGAGCCACGGTACGCGACGAGACACCGTTGTGTACGATCGCACATTGGCAAGATAGCCTTGC
GAAGCGGTGATCTGCGTGTCTAACATAGTCCGGTCTTGTCTTTGTCCCGGCAACGATGCCGAGATG
TCTAAACACCCTGGGCTGGTTCTCATACTCGGGAAGCTGATTCTGCTCCATCACGAACATCCTGAGAGGA
AGCGCGCCCCACAGACATACGAAAAAGAAGAGGATGAGGATAAAGGAGTGGCATGCAAGTAAAGACAGGTG
GTGGTGGGACTGTCTCGAGGTGCTGAGAGATAACACCTTGGTCACTCTGGCTAACATATCCGGGCAGCTG
GATCTTTCCGCCTATACAGAGTCTATTTGCCTCCCTATACTGGATGGCCTGCTGCACTGGATGGTGTGTC
CATCAGCCGAAGCTCAAGACCCTTCCCAACCGTCGGCCCAAACAGTGTGCTGTCCACAGCGCCTGGT
GCTCGAGACACTCTGCAAGCTTTCTATTCAGGACAATAATGTGATCTCATTCTCGCGACACCCCTTTTC
TCCCGGCAGGAGAAATTTTACGCCACCCTGGTTTCGCTATGTAGGCGATAGAAAGAATCCCGTCTGCCGGG
AGATGAGCATGGCACTGCTCTAATCTGGCCAGGGAGACACGCTGGCTGCCCGGCCATTGCCGTCCA
AAAAGGCAGTATAGGGAACCTGATCTCTTTTCTGGAAGATGGCGTAACCATGGCACAGTACCAACAATCA
CAGCAATCTGATGCATATGCAACCTCCACCCTGGAGCCCCCAGCGTGGACATGATGTGTCGGGCCG
CCAAGGCCCTTTGGCCATGGCACGGGTGGACGAAAACCGGAGCGAGTTTCTGCTCCATGAGGGAAGACT
GCTCGACATTAGTATAAGTGTGTTCTCAATTCTCTCGTGGCCTCTGTGATCTGCGACGTGCTTTCCAG
ATCGGACAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR214151 representing NM_001085355
 Red=Cloning site Green=Tags(s)

```

METGLLPNHKLKAVGEAPAAPPHQHHHHHAHHHHHHHHLHHLHHHHLQQQLNQFQQPQPQQQQ
PPPPQQQHPTANNSLGGAGGGAPQPGPDMEQPQHGGAKDSVAGNQADPQGQPLL SKPGDEDDAPPKMGE
PAGSRYEHPGLGAQQQPAPVAVPGGGGPAAVSEFNYYGSAAPASGGPGGRAGPCFDQHGGQQSPGMGM
MHSASAAAAGAPSSMDPLQNSHEGYPN SQYNHYPGYSRPGAGGGGGGGGGGGGGGGGGAGGAGGAAA
AAAGAGAVAAAAAAAAAAAAAAAAAGGGGGGGYSSSSGYGLSSPRQQGGGMMMPGGGGAASLSKAAAGAA
AAAGGFQRFAGQNQHPSGATPTLNQLL TSPSPMRSYGGSYPDYSSSAPPSPQPSQAAAGAAAGGQQ
AAAGMGLGKDLGAQYAAASPAAAAQQRSH PAMSPGTPGPTMGRSQGSPMDPMVMKRPQL YGMGTHPHSQ
PQQSSPYPGGSYPPGAQRYPLGMQGRAPGALGGLQYPQQQMPQYQQAVSGYCQQGQPYYNQPPQS
HLPPQAQYLQPAQAASQRYQPQDMSQEGY GTRSQPPLAPGKSNHEDLNL IQQERSSLPDL SGSIDDL
PTGTEATLSSAVSASGSTSSQGDQSNPAQSPF SPHASP HLSSIPGGPSPSPVGS PVGSNQRS GPI SPAS
IPGSQMPQPQPGSQSESSHPAL SQSPMPQERGFMTGTQRNPQMSQYGPQQTGPSMSPHPSPGGQMHPGI
SNFQQSNSSGTYGPMQSYGPGQNYSRTP TYSGVPSASYSGGPGMGMINANNQMHGQGAQPCGAMPLGR
MPSAGMQNRPFPGTMSSVTPSSPGMSQQGGPGMPPMPTVNRKAQEAAAAVMQAAANSAQRQGSFPGMN
QSGLVASSSPYSQSMNNSLMSTQAQPY SMTPTMVNSSTASMGLADMSPSEKLSVPLKADGKEEGVS
QPESKSKDSYGSQGISQPPTPGNLPVPS PMSPPSASISSFHGDES DSISSPGWPKTPSSPKSSSSSTTGE
KITKVYELGNEPERKLWVDRYLTFMEER GSPVSSLPVAVGKKPLDLFRL YVCVKEIGGLAVNKNKKWREL
ATNLNVGTSSSAASSLKKQYIQYLFAFE CKTERGEEPPPEVFSTGDSKKQPKLQPPSPANSGSLQGPQT
QSTGSNSMAEVPDGLKPPTPASTPHGQMTPMQSGRSSTVSVHDPFSDVSDSAYPKRNSMTPNAPYQQGMG
MPDMMGRMPYEPNKDPFSGMRKVPGSSEPFMTQGGV PNSGMQDMYNQSPSGAMS NLGMGQRQQFPYGTSY
DRRHEAYGQQYPGQPPTGPPYGGHQPL YPQQPNYKRHMDGMYGPPAKRHEGDMYNMQYGSQQQEMYN
QYGGSYSGPDRRPIQGGYYPYNYRERMQGP GQMOPHGI PPQMMGGPMQSSSSEGPQQNMWATRNDMPYYPY
QSRQGGGPAQAPPYPGMNRTDDMMVPEQRINHESQWPSHVSQRQPYMSSASMQPI TRPPQSSYQTPPS
LPNHISRAPSPASFQRSLESRMSPSKSPFLPTMKMQKVMPTVPTSQVTGPPPQPPPIRREITFP PGSVEA
SQPILKQRRKITSKDIVTPEAWRVMMSL KSGLLAESTWALDTINILL YDDSTVATFNLSQLSGFLELLVE
YFRKCLIDIFGILMEYVGDPSQKALDHRSGK KDDSQSLEDDSGKEDDDAECLVEEEEEEEEEEDSEKI
ESEGKSSPALAAPDASVDPKETPKQASKFDKLP IKIVKKNKLFVVD RSKLGRVQEFSSGLLHWQLGGGD
TTEHIQTHFESKMEIPRRRPPPLSSTGKKKELEGKGDSEEQPEKSIIATID DVL SARGALPEDTNPG
PQTDSGKFPGIQQAKSHRNIRLLEDEPRSRDE TPLCTIAHWQDSLAKRCICVSNIVRSLFVPGNDAEM
SKHPGLVLILGKILLLHHEHPERKRAPQTYEKEEDEDKGVACSKDEWWWDCLEVL RDNTLVLANISGQL
DL SAYTESICLPI LDGLLHWMVCP SAEAQDPFPTVGPNSVLS PQRLVLET LCKLSIQDNNVDLILATPPF
SRQEKFYATLVRYVGD RKNPVCREMSMALLSNLAQGD TLAARAIAVQKGSIGNLISFLEDGVTMAQQQS
QHNLMMMQPPLEPPSVDMMCRAAKALLAMARVDENRSEFLLHEGRLLDISISAVLNSLVASVICDVL FQ
IGQL
  
```

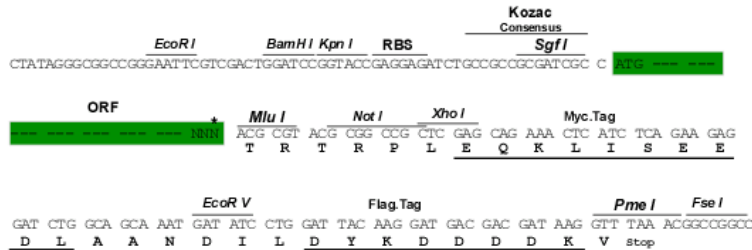
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001085355

ORF Size: 6732 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:

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_001085355.1](#), [NP_001078824.1](#)
RefSeq Size: 11325 bp

RefSeq ORF: 6735 bp

Locus ID: 239985

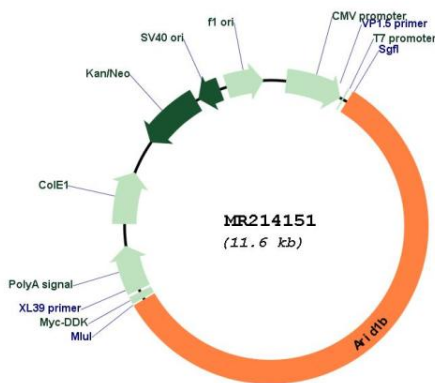
UniProt ID: [E9Q4N7](#)

Cytogenetics: 17 A1

MW: 237.8 kDa

Gene Summary: Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a postmitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to postmitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth (PubMed:17640523). Binds DNA non-specifically.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR214151