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Product datasheet for SC112926

RAI2 (NM_021785) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	RAI2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC112926 sequence for NM_021785 edited (data generated by NextGen Sequencing)

ATGGACGACCTGCAGTCCCAGAACCTCTCCATGGACATGACTGACTCCCCTCCTGCCTTG
GCTAATAACAGACTGGAGAATGGCATGGCTCAGCTGATCACCACCGAGGCCTGGAACATC
AACTCCACTGACCTGGTAAAGAAGGCCCTGGTGACCGTGCCAGCCCCATCCATTCTGAAC
CCCCCTGCCGAGTCTCAGAGTGGCATGGCTCTGAAGGTGGCGGCCACTGTGTTGCAGCCC
CTGTGCCTCGGGGAGAGCCCAGTGGTGATGCCCATTCACATGCAGGTGGAGGGAAGCTCC
GCACCAGAGCTCAATCCGAATGGCAATGCCACCTACGTCATGACCACCCAGGGCCCCGTG
CAACTGCCCGTGGTGCTGGAGCAGCACGTCTTTCAGCACCTCAACTCCCCTCTGGTCCTG
CCGCAGGAGGCCCCATGCTCCTCCAGTACCATCCACAACAACCTCTTCCAGGGAGCGGAG
GACCCCGAGGCCCAGCCCCAGCTCCTGGACCTGAGGATCCCCAGCCAGCCGCAGGAGCCC
ACTTTGCCATTTGAAGCTGTGCTCCAGAATTTGTTTCCCTCCCAGGGCACTCTCGGGCCC
CCACCCTGTCAGCCTCCTCCTGGCTATGCCCCTGTGCCCCCACAGCCTTTTAGCTCCCCC
TTGTCCCCCCTGGTCCCACCAGCCACCCTCTTGGTGCCGTATCCTGTAATCGTCCCCTTG
CCTGTGCCAGTCCCTATTCCCATCCCCATCCCGGTGCCTCAGAGTTCTGAATCCAAGTTC
AGCTCCAGTTTCCCCAAGCCACCATCTTCCTTCGGCCTGCACCCCTTTAAAGGCACCCAG
ACCCCTCTGGAAAAAGATGAACTGAAGCCCTTTGACATCCTCCAGCCTAAGGAGTACTTC
CAGCTCAGCCGCCACACGGTCATTAAGATGGGAAGTGAGAACGAGGCCCTGGATCTCTCC
ATGAAGTCAGTGCCCTGGCTCAAGGCTGGTGAAGTCAGTCCCCCAATCTTCCAGGAAGAT
GCAGCCCTAGACCTGTCAGTGGCAGCCCACCGGAAATCCGAGCCTCCCCCTGAGACACTG
TATGACAGTGGTGCATCAGTGGACAGCTCAGGTCACACAGTGATGGAGAAACTTCCCAGT
GGCATGGAAATTTCTTTTGCCCCTGCCACGTCCCATGAGGCCCCAGCCATGATGGATAGT
CACATCAGCAGCAGTGATGCTGCTACCGAGATGCTCAGCCAGCCCAACCACCCCAGCGGC
GAAGTCAAGGCTGAAAATAACATTGAGATGGTGGGCGAGTCCCAGGCGGCCAAGGTCATT
GTCTCTGTCGAAGATGCTGTGCCTACCATATTCTGTGGCAAGATCAAAGGCCTCTCAGGG
GTGTCCACCAAAAACTTCTCCTTCAAAAGAGAAGACTCCGTGCTTCAGGGCTATGACATC
AACAGCCAAGGGGAAGAGTCCATGGGAAATGCAGAGCCCCTTAGGAAACCCATCAAAAAC
CGGAGCATAAAGTTAAAGAAAGTGAACTCCCAGGAAATACACATGCTCCCAATCAAAAAA
CAACGGCTGGCCACCTTTTTTCCAAGAAAGTAA

Clone variation with respect to NM_021785.4

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_021785 unedited

GTCAAATTTTGTATACGACTCACTATAGGGCGGCCGCGAATTCGCACGAGCCGGGGACTG
CCGGGGAGGCGGCGCCGGCCGGCGGGGCGGGGGCCCCGAAGTGGGTTTCGGGCCGCCGCC
CGCACTGGCATCGGGCGCAGAGGGCGGTGCACGGCGGACTCCGCGCCCAGGCACCGCACC
GGGCAGTCTCCGGATCTGCCGTTCTGCCCCGGCCCGGAAAACCCGGCGCCTTCCAGGCCC
TTCGAAAGATGGATTCTGTTGACGTATCTGGCGGCCCTGGCGAGCCTGGTGGAAAGTTGG
GTTTTGCCAGATTGCGCCGGGCTCCTCTTTGTGACGCGCGGCCAGCCCCGCATCCCCCCC
GGAGCCGGGCCAAGTGGCATCAGAGCTGAGTGATGGACGACCTGCAGTCCCAGAACCTCT
CCATGGACATGACTGACTCCCCTCCTGCCTTGGCTAATAACAGACTGGAGAATGGCATGG
CTCAGCTGATCACCACCGAGGCCTGGAACATCAACTCCACTGACCTGGTAAAGAAGGCCC
TGGTGACCGTGCCAGCCCCATCCATTCTGAACCCCCCTGCCGAGTCTCAGAGTGGCATGG
CTCTGAAGGTGGCGGCCACTGTGTTGCAGCCCCTGTGCCTCGGGGAGAGCCCAGTGGTGA
TGCCCATTCACATGCAGGTGGAGGGAAGCTCCGCACCAGAGCTCAATCCGAATGGCAATG
CCACCTACGTCATGACCACCCAGGGCCCCGTGCAACTGCCCGTGGGTGCTGGAGCAGCAC
GTCTTTCAGCACCTCAACTCCNCTCTGGTNCTGCCGCAGGAGGGCCCATGCTCCTNCAGT
ACATNCACACAACCTCTTNCAGGGAGCGAGACCCCGAGCCCANCCCAGCTCTGACCTGAG
ATCCCAGCAGCGCAGAGCCACTTGCATTGAAGCGGCCANAAAATTGTTCTCGGNNCTTTT
AGCCCCACCTC

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_021785 unedited
NCGTATACTAGNACCGCGCCGCAATCTANGATCGATTTTTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTTTTTTTTTAGGGCAAACAAACATTTATTGGGAAATATTCATCCCACCCTTT
ATTAGGTATTACATCATCAAAGCACTTTGGGGCAATGAAAATAGCTTTTTTTACCCCTCT
AATTCACCCAATATTCCATTAAAGCTGCAAAAAATGTGCAATCTGCTTGAAAAATAGGTT
GCTCTTATTTACCCATTTGGGAAAAGTCAAAAATTAAAAAAGAAAATGATACTAGCATAC
AGGGCCTCTAGAGCCAATTCACCTTTCCATTTCCCAACTACTCCCCAAAATAATTAACAA
AGATAATTTGTTTTAAATGCCTTTTTATAAAACCAATGCACCTTTCCCCATATTATAATC
ATACAAATTTTAAAAAGCCGTTATTTACTTTCTTGGAAAAAAGGGGGCCAGCCGTTGTTT
TTTGATTGGGAGCATGTGTATTTCCTGGGAGTTCACTTTCTTTAACTTTATGCCCCGGTT
TTTGATGGGTTTCCTAAGGGGCTCTGCATTTCCCATGGACTCTTCCCCTTGGCTGTTGAT
GTCATAACCCTGAAGCACGGAGTCTTCTCTTTTGAAGGAAAAGTTTTTGGTGGACACCCC
TGAGAGGCCTTTGATCTTGCCACAGAATATGGTAGGCACAGCATCTTCGACAGAAACAAT
GACCTTGGCCGCCTGGGACTCGCCCACCATCTCAATGTTATTTTCAGCCTTGACTTCNCC
GCTGGGGTGGTTTGGGCTGGCTGAACAACTCGGTAGCAGCTCACTGCTGCTGATGTGCTA
TCCCTCATGGCTGGGGCCCCATGGGACGTGGCACGGGGCCAAAAAAATTCCAGGCCCCTG
GGAAGTTTCCCCTA
```

Restriction Sites: NotI-NotI

ACCN: NM_021785

Insert Size: 2500 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:

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_021785.2, NP_068557.1

RefSeq Size: 2338 bp

RefSeq ORF: 1593 bp

Locus ID: 10742

UniProt ID: Q9Y5P3

Cytogenetics: Xp22.13

Gene Summary: Retinoic acid plays a critical role in development, cellular growth, and differentiation. The specific function of this retinoic acid-induced gene has not yet been determined but it may play a role in development. The chromosomal location of this gene designates it to be a candidate for diseases such as Nance-Horan syndrome, sensorineural deafness, non-specific X-linked cognitive disability, oral-facial-digital syndrome, and Fried syndrome. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Feb 2010]
Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2 and 3 encode the same isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.