

Product datasheet for **RG206638**

RAI2 (NM_021785) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAI2 (NM_021785) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RAI2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG206638 representing NM_021785
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACGACCTGCAGTCCAGAACCTCTCCATGGACATGACTGACTCCCCTCCTGCCTTGCTAATAACA
 GACTGGAGAATGGCATGGCTCAGCTGATCACCACCGAGGCTGGAACATCAACTCCACTGACCTGGTAAA
 GAAGGCCCTGGTACCCTGCCAGCCCCATCCATTCTGAACCCCTGCCGAGTCTCAGAGTGGCATGGCT
 CTGAAGGTGGCGGCCACTGTGTTGCAGCCCTGTGCCTCGGGGAGAGCCAGTGGTATGCCATTACACA
 TGCAGGTGGAGGAAGCTCCGCACCAGAGCTCAATCCGAATGGCAATGCCACCTACGTATGACCACCA
 GGGCCCGTGCAACTGCCCGTGGTGTGGAGCAGCAGCTTTTCAGCACCTCACTCCCCTCTGGTCTG
 CCGCAGGAGGCCCATGCTCCTCCAGTACCATCCACAACAACCTTTCCAGGGAGCGGAGACCCCGAGG
 CCCAGCCCCAGCTCCTGGACCTGAGGATCCCAGCCAGCCGAGGAGCCCACTTTGCCATTTGAAGCTGT
 GCTCCAGAATTTGTTCCCTCCCAGGGCACTCTCGGGCCCCACCCTGTCAGCCTCCTCTGGCTATGCC
 CCTGTGCCCCACAGCCTTTTAGCTCCCCCTTGTCCCCCTGGTCCCACAGCCACCCTCTTGGTGCCT
 ATCCTGTAATCGTCCCCTTGCTGTGCCAGTCCCTATTCCCATCCCCATCCCGGTGCCTCAGAGTTCTGA
 ATCCAAGTTCAGTCCAGTTTCCCAAGCCACCATCTTCTTCGGCTGCACCCCTTTAAAGGCACCCAG
 ACCCTCTGAAAAAGATGAACTGAAGCCCTTTGACATCTCCAGCCTAAGGAGTACTTCCAGCTCAGCC
 GCCACACGGTCATTAAGATGGGAAGTGAGAACGAGGCCCTGGATCTCTCCATGAAGTCAAGTGGCT
 CAAGGCTGGTGAAGTCAAGTCCCCAATCTTCCAGGAAGATGCACCCCTAGACCTGTCAGTGGCAGCCAC
 CGGAAATCCGAGCCTCCCCGTGAGACACTGTATGACAGTGGTGCATCAGTGGACAGCTCAGGTACACAG
 TGATGGAGAACTTCCCAGTGGCATGGAATTTCTTTTGGCCCTGCCACGTCCCATGAGGCCCGCCAGCCAT
 GATGGATAGTCACATCAGCAGCAGTGTGCTACCGAGATGCTCAGCCAGCCCAACCACCCAGCGGC
 GAAGTCAAGGCTGAAAATAACATTGAGATGGTGGCGAGTCCCAGGCGGCCAAGGTCATTGTCTCTGTCTG
 AAGATGCTGTGCCTACCATATTCTGTGGCAAGATCAAAGGCCCTCTCAGGGGTGTCCACAAAAAATTCTC
 CTTCAAAGAGAAGACTCCGTGCTTCCAGGGCTATGACATCAACAGCCAAGGGGAAGAGTCCATGGGAAAT
 GCAGAGCCCTTAGGAAACCCATCAAAAACCGGAGCATAAAGTTAAAGAAAGTGAATCCCAGGAAATAC
 ACATGCTCCAATCAAAAAACAACGGCTGGCCACCTTTTTTCCAAGAAAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

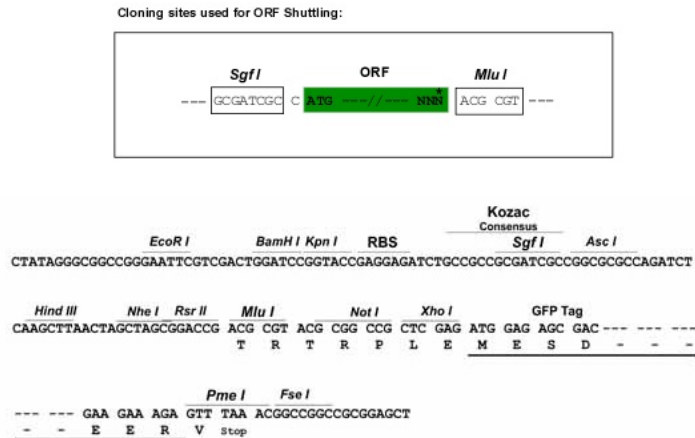
>RG206638 representing NM_021785
 Red=Cloning site Green=Tags(s)

MDDLQSQNL SMDMTD SPPALANNRLENGMAQLITTEAWNINSTD LVKKALVTV PAPSILNPPAESQSGMA
 LKVAATV LQPLCLGESP VVMP IHMQVEGSSAPELNPNGNATYVMTTQGPVQLPVVLEQHV FQHLNSPLVL
 PQEAPCSSSTIHN L FQGAEDPEAQPLL DLRI PSQPQEPTLPFEAVLQNLFPSQGT LGPPP CQPPPGYA
 PVPPQPFSSPLSPLVPPATLLVPYPIVPLPVPVPIPIPIV PQSSESKFSSSF PKPPSSFLHPFKGTQ
 TPLEKDELKPF DILQPKEYFQLSRHTVIKMGSENEALDLSMKSVPLKAGEVSPPIFQEDAPLDLSVAAH
 RKSEPPPETLYDSGASVDSSGHTVM EKLP SGMEISFAPATSHEAPAMMDSHISSSDAATEMLSQPNHPSG
 EVKAENNIEMVGESQA AKVIVSVEDAVPTIFCGKIKGLSGVSTKNFSFKREDSVLQGYDINSQGEESMGN
 AEPLRKP IKNRSIKLKKVNSQEIHMLPIKKQRLATFFPRK

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_021785

ORF Size: 1590 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_021785.2](#), [NP_068557.1](#)

RefSeq Size: 2338 bp

RefSeq ORF: 1593 bp

Locus ID: 10742

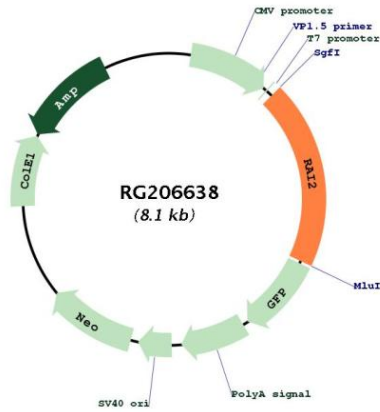
UniProt ID: [Q9Y5P3](#)

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]

Product images:



Circular map for RG206638