

## Product datasheet for **MR208641**

### **Fam20a (NM\_153782) Mouse Tagged ORF Clone**

#### **Product data:**

|                                  |                        |
|----------------------------------|------------------------|
| <b>Product Type:</b>             | Expression Plasmids    |
| <b>Tag:</b>                      | Myc-DDK                |
| <b>Symbol:</b>                   | Fam20a                 |
| <b>Synonyms:</b>                 | AI606893               |
| <b>Mammalian Cell Selection:</b> | Neomycin               |
| <b>Vector:</b>                   | pCMV6-Entry (PS100001) |
| <b>E. coli Selection:</b>        | Kanamycin (25 ug/mL)   |



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**ORF Nucleotide Sequence:** >MR208641 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGCCCGGGCTGCGCAGGGACCGCCTGCTGGCCCTGCTGCTCCTGGGCGCGCTCTTCTCCGCCGACCTCT  
 ACTTCCACCTCTGGCCGCAAGTGCAGCGCCAGCTCCGGCCGGGCGAGCGCCCCGCCGCTGCCCGTGCTC  
 TGGCCGCGCCCCCTCCGCGTCTCTACACTCAGCCGAGCCTCCCGAGACCTTGGCACAGCCTCGCACAAAC  
 TTTTCAGGAGCTTTGCCCGGGTTGAGCATCCAGCCGCGGCCACCCTGCCCGCGCTCTAAGCTGCAGG  
 CCCTCTTCGCCCACTCGCTCTACCAAGTCTGGAGGATCCGCCTCTCTGGGACCCGAAGACTGGCTCCT  
 GGCCAGCCAGGAGGCGCTGCGGTATTACCGAGGAAGGTGGCCCGCTGGAACAGACGGCACAAATATAC  
 AAAGAACAATTCAACCTTACCTCCTTGGATCCCCCGCTCCAGTTTCGACCAGAGGCCAGCTGGGTCCAGT  
 TCCACTTGGGGATCAACAGCCACGGGCTGTACTCCAGTCCAGCCTTGCCATCAGCAAGCTCCTCCATGA  
 CATGAGACACTTCCCCACCATCAGTGCTGATTACAGCCAGGATGAAAAAGCCTTGCTAGGGGCTGTGAC  
 TGCTCAGACATTGTGAAACCCAGTGGGGTCCACCTGAAATTGGTTCTGAGGTTCTCGGACTTCGGGAAAG  
 CCATGTTCAAACCCATGAGACAGCAGCGAGAGGAGGAGACGCTGAGGACTTCTTCTATTTATAGACTT  
 TCAGAGACACAATGCTGAGATCGCAGCTTTCACCTGGACAGGATTCTGGACTTCCGACGGGTACCGCCA  
 ACAGTAGGGAGGCTAGTGAATGTCACCAAGGAAATCTAGAGGTACCAAGAAGCAGATCCTACAGAGTG  
 GTTCTTTGTGTCTCCAGCTAACAACGTGTGCTTCTTCGCCAAGTGTCCGTACATGTGCAAGACCGAGTA  
 CGCTGTCTGTGGCAACCCACACCTGCTGGAAGGCTCCCTCTCGCCTTCTGCCATCCCTCAACCTAGCC  
 CCCAGACTGTCTGTGCCAACCCTGGATCCGTTCTACTCGCTGTCAGGAAAAGAGGAGTGGGAGCTCA  
 ACCCCCTTTACTGTGACACAGTCAAGCAGATCTACCCGTACAACAGCAGCAACAGACTCCTCGGCATCAT  
 TGACATGGCCGTCTTTGACTTCTGATTGGAAATATGGACCGACACATTATGAGATGTTACCAAATTT  
 GGGGATGATGGATACCTTATTCATCTTGACAATGCCAGAGGTTTCGGACGACATTCCAGGATGAAATCT  
 CTATCTCGCCCTCTAGCGCAGTGTTCATGATCAAAAGGAAAACACTTTCACCTTCAGCTGCTGGC  
 TCAGGCTGACTACAGGCTCAGCGAGTGTGCGGGAGTCACTTCTAGAAGACCAGCTCAGCCCTGTCCTC  
 ACAGAACCCACCTCCTGGCCCTGGACCGAGACTCCAGATCATCTGAAGACCGTGGAGGACTGCATAG  
 AGGCCACGCGAGCGAAGAGTCATAGCCGAAGGTCAGCACAACGTTTCGGCTCCAGACTCCGGCCAGGC  
 TAATCTGACGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:** >MR208641 protein sequence  
 Red=Cloning site Green=Tags(s)

MPGLRRDRLLALLLGLFSAADLYFHLWPQVQRQLRPGERPAACPCSGRAPSSASLHSAASRDLTASHN  
 FSGALPRVEHPSRGHPAPRSKLQALFAHSLYQVLEDPPLLPEDWLLASQALRYRRKVARWNRHRIY  
 KEQFNLTSLDPPLQFRPEASWVQFHLGINSHGLYSRSSLAISKLLHDMRHPTISADYSQDEKALLGACD  
 CSQIVKPSGVHLKLVLRFSDFGKAMFKPMRQQREEETPEDFFYFIDFQRHNAEIAAFHLDRILDFFRVPP  
 TVGRLVNVTKIELEVTKNEILQSVFFVSPANNVCFFAKCPYMCKTEYAVCGNPHLLEGLSAFLPSLNLA  
 PRLSVPNPWIRSYSLSGKEEWELNPLYCDTVKQIYPYNSSNRLLGIIDMAVDFLIGNMDRHHYEMFTKF  
 GDDGYLIHLNARGFGRHSQDEISILAPLAQCCMIKRKTLHLQLLAQADYRLSDVMRESLLEDQLSPVL  
 TEPHLLALDRRLQIILKTVEDCIEAHGERRVIAEGSAQRSAPDSGQANLTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:



**ACCN:** NM\_153782

**ORF Size:** 1623 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.

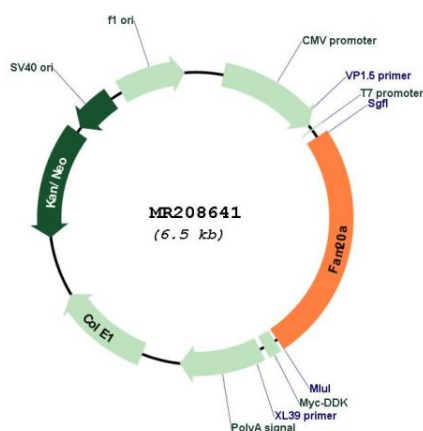
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_153782.2](#)

**RefSeq Size:** 2614 bp  
**RefSeq ORF:** 1626 bp  
**Locus ID:** 208659  
**UniProt ID:** [Q8CID3](#)  
**Cytogenetics:** 11 E1  
**MW:** 61.5 kDa

**Gene Summary:** Pseudokinase that acts as an allosteric activator of the Golgi serine/threonine protein kinase FAM20C and is involved in biomineralization of teeth. Forms a complex with FAM20C and increases the ability of FAM20C to phosphorylate the proteins that form the 'matrix' that guides the deposition of the enamel minerals.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR208641