

The following demonstrates the most complete and longest known mRNA sequence of the gene FAM227A with RefSeq NM_001013669.1. The sequence shows an upstream in-frame stop codon, start and stop codons, exons, phosphorylation sites, and a poly-adenylation tail. The sequence has no known ribosome binding sites, microRNA binding sites, or signal peptides¹.

| | c | 1 |
|------|---|------|
| 2 | cgccccggcctctaccaccgaggaaaggggtaaccggcgcggggggttcccagcgccagcct | 61 |
| 62 | gcgccaatccccagaaactccgtgaatcacctcgggatagcaaacggattatacaaagggc | 121 |
| 122 | agtgtcttctgggggtccttttcatgcctctaggaccaggacctgcattcacctctccac | 181 |
| 182 | tgacacattgggtctggggcccccgccggctgtcaccatagaaaacggcatctcgcggaca | 241 |
| 242 | acgcggcggctcacgaaggttccattggtatgctaaacgggaagtggagaccgcgcgg | 301 |
| 302 | cgttgcctagagaacgcctggactcagatgtagcaaaatgggcctctccccaaactcccctc | 361 |
| 362 | ctcatccccagcacaaggcaaggccacccttgctgtgagtttgggggcaccggctgt | 421 |
| 422 | cgggggcccagaccagaactttgcggggtccccctgagggaccctggcgggaccggccccg | 481 |
| 482 | ggttcgtcaaattccgccgatgctttcagggctgattaaacaaacgacaagattggag | 541 |
| 542 | tgggaaatgagaggctctttaaagtggaagcttttgtttgtccatttacaagaaattgg | 601 |
| | <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">M</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">N</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">H</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">F</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">R</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">K</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">M</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">E</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">V</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">I</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">N</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">L</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">T</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">T</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">L</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">P</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">M</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">I</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">P</div> </div> | 19 |
| 602 | acgaatggaatcacttcaggaagatggaggtcatcaacctcaccaccctacctatgatacca | 661 |
| | V D E H L A V S L V A R N T M V K T V R | 39 |
| 662 | gtggatgagcacctggctgtctcgttgtcgcacggaataacaatggtgaagactgtgagg | 721 |
| | K E L E N N P P S C L I G S M H Q V N Q | 59 |
| 722 | aaggagttagagaacaatccaccctcatgccttattggctccatgcaccaggtgaaccaa | 781 |
| | K I A D I N L R T E P S A N S L A I E R | 79 |
| 782 | aagattgctgacataaatctgcgtaccgagccgtcggccaacagcctggcaattgagaga | 841 |
| | F E L E K K A L R E K T R S S P E D K V | 99 |
| 842 | tttgagttggagaagaaggctttaagagagaaaactcgcagcagtcacagaagacaaagt | 901 |
| | K R Q R K S Q Y S C K G S E L R H A R S | 119 |
| 902 | aagagacaaaggaaatctcagtattcctgcaaaggctccgaactcagacatgccagatct | 961 |
| | S V I K R K T A D K N L L A E L Y Q Y S | 139 |
| 962 | tctgttataaaaaggaaacagcagataaaaatctgctggcagagctgtaccagttattcc | 1021 |
| | N F N S S K P N K L P T N G V D F C D M V | 159 |
| 1022 | aaacttcaacagctccaagccaaacaagcttcgaaatggcgtggacttctgtgacatgggt | 1081 |
| | G N V V R A E R D C L S G K H F C S G R | 179 |
| 1082 | ggcaactgtggctcgggctgagagagactgccttagtggcaagcatttctgttcaggtaga | 1141 |
| | E L E K F L S S S S P R A I W L D S F W | 199 |
| 1142 | gaattagagaagtttctctcttcttcttccaagagccatctggctggatagcttttgg | 1201 |
| | W I F H E R Y Q P N K E L Q N N L F D R | 219 |
| 1202 | tggatatttcatgagaggtaccagccaaacaaggagctccagaataatctgtttgaccgg | 1261 |
| | I A Q H Y A L L L F R V P K S H S E E A | 239 |
| 1262 | atagcccagcactatgccttacttttgtttcgtgtacccaagtcccactctgaagaggcg | 1321 |
| | L L K R L P S L L S K A V Y T S F C C C | 259 |
| 1322 | ctcttaaaaaggctgccatcacttctcagcaaaagccgtgtacaccagcttctgttgctgc | 1381 |
| | F P Q S W F D T H E F K S D I C N T M S | 279 |
| 1382 | tttccacagtcctggttcgacacgcacgaattcaagtctgacatctgtaacacaatgagc | 1441 |
| | L W I S G T Y P S P Q S Y D S W A Y S E | 299 |
| 1442 | ctgtggatttcaggcacctatcctagcccacagagctatgacagctggactactcggaa | 1501 |
| | L D P E R F R R E E L M L Y R R R L T K | 319 |
| 1502 | ctagaccagagcgtattccgcagagaagaattaatggtgtacagaagaagactgacaaag | 1561 |
| | G R E F S L F A G K R A F S Q K P A Q S | 339 |
| 1562 | gggagagagtttctttgtttgctggtaagagagccttctcccagaagccagcccagagc | 1621 |
| | R K F Y H P Q S S S A N S P S E K T S S | 359 |
| 1622 | aggaaattctaccaccctcagttctctagtgcaaaattcaccagtgaaaaaacctcttcg | 1681 |
| | A K Q N S E K S L R M Q N T A K E H H C | 379 |

¹NCBI Gene (National Center for Biotechnology Information) entry on FAM227A [https://www.ncbi.nlm.nih.gov/gene/646851].

| | | | |
|------|---|------|------------------|
| 1682 | gccaagcagaactcagaaaaaagcttacgaatgcagaataactgcaaaaagagcatcattgt | 1741 | ex12/ex13 |
| | Q T L V L K K P T Q E V K R I S E A R E | 399 | |
| 1742 | cagaccctgggtcctgaagaaacctacgcaagaagtcaagaggatatcagaagcaagagaa | 1801 | |
| | C E N M F P K K S C A A C K S P E L T S | 419 | |
| 1802 | tgtgagaatatgtttcctaaaaagtctgtgtgctgctgcaaaaagccctgagctgacttca | 1861 | ex13/ex14 S1827L |
| | N L F N I Y G K S P L I V Y F L Q N Y A | 439 | |
| 1862 | aacctcttcaacattttatgggaagagccctctgattgtgtactttctccagaactatgcc | 1921 | |
| | S L Q Q H G K N V L I V R R E K T T S T | 459 | |
| 1922 | agtctgcagcagcagcggaagaatgtgttgatagtcagaagggaaaagaccacgagcacc | 1981 | |
| | P D C T P T Y T D V I S E T L C S M K K | 479 | |
| 1982 | cctgactgcacccaacgtatactgatgtcatcagcgagaccctgtgcagcatgaagaag | 2041 | ex14/ex15 |
| | R K D N L N Q L Y Q H H W T E W N Y F C D | 499 | |
| 2042 | cggaaagacaacctcaatcagttgtaccagcatcattggactgaatggaatttttgac | 2101 | F2097S |
| | K H L K E L Q D N F S R E M K N I D P K | 519 | |
| 2102 | aagcatctaaaggagctgcaagacaacttctccagggaatgaagaatattgatccaaaa | 2161 | ex15/ex16 |
| | A A D T K K A N H M F I P P S A V N E E | 539 | |
| 2162 | gcagcagatacaaaaaaggcaaacccatgttcatcccaccttcagccgtcaatgaggaa | 2221 | |
| | S P D K K T K E G K G G E G K R R E T E | 559 | |
| 2222 | tcacctgacaagaaaactaaaggaggggaaaggaggaggggaaagagaagagaaacagaa | 2281 | ex16/ex17 |
| | V E H F F P L T S K P * | 571 | |
| 2282 | gttgaacatttctttccactcacttccaagccctgaggagctccacaacctagaaccagg | 2341 | stop codon |
| 2342 | aagcgctacagaatccgtgatatttctgctacgaggtggagtggaacaagaaaataaga | 2401 | |
| 2402 | aaattgtggccaaagacagaaataggaatcatgatttctccataggggaaggattccggt | 2461 | |
| 2462 | gtagtttttcttaggctgagtgaaaagcaggagtagagagttgggtgcttgggtcactaca | 2521 | |
| 2522 | tttattcatagatttactctttcagtttttattacgtgcatgctggtaagtatgttaca | 2581 | |
| | | | |
| 2582 | aatatgacctcatacaaaggtaaaaactttcataccagccgtatgaagttagggattatcca | 2641 | |
| 2642 | ctgcattttacgcagcagcaagcccagggttagaaaagggtttccgaagttctctgctgtag | 2701 | |
| 2702 | acactgggtaattaacagtagataagacacagtcacctgttctcaagggagtcaccatctg | 2761 | |
| 2762 | gtagaggggaagacagatgtatcaacacattaaatgctgtaagtattggacagagggaaaaa | 2821 | |
| 2822 | gagaaaagtgtgtgagggaaaaggaaaatgggcctagaggagtgcaattttttgtaaca | 2881 | |
| 2882 | agctttgtggaaactattaatttgataatttgataggcgcttctattatgctgacctgaa | 2941 | |
| 2942 | cctttgacctctgctcctctaaccactgggattgccagcctatttccaatatgccctctt | 3001 | |
| 3002 | tctgacctggcaaacatcttgtcttttctaaactcagcccaggacatgacatctgtaatg | 3061 | |
| 3062 | tgtttctgtgtgactcccaggcttctgcttcttaacctctcaccttccagctcatttga | 3121 | |
| 3122 | gtgaatctttgtccaagaattgagagaaaactttataggtaaagcatgcacatgttgtctg | 3181 | |
| 3182 | atthaatctaaaatagaaaataagaaaacaaaaataataactgcaactagggacacattta | 3241 | |
| 3242 | gtcactcccagttcatgagacaaggaatagtaaagttcattcctaccatagcaaaaagtca | 3301 | |
| 3302 | ggattttaaattgtaaattatTTTTTTTaatTAAAAAattTaaattaggccagggcgtgggtg | 3361 | |
| 3362 | gctcacacctgtaatcccagcactttgggaggctgaagtgggcagatcacgaggtcagga | 3421 | |
| 3422 | gttcgagaccatcctggccaacatgggtgaaaccccatctctactaaaaatacaaaaatta | 3481 | |
| 3482 | gctggatgttgtggcgggcacctgtaatcccagctactcgggaggctgaggcagaagaat | 3541 | |
| 3542 | cgttggaacccagggtggcggagggtgacgtgagccaagaccatgctattgcaactccagcc | 3601 | |
| 3602 | tgggcaacaagagcgaactctgtctcaaaaaaaattTTTTTTTaatTaaattTaaactaa | 3661 | |
| 3662 | atTaaattTTTTTtagaggcagactctcagctctgttgtccaggctggaatgcagtgccgag | 3721 | |
| 3722 | tcatagctcactgcaacctcaaattcctgggctgaagcaatcctcccacctcagcctccc | 3781 | |
| 3782 | aagtagctaggactacaggtatgccaccatgtctggctaattTTTTTaaagaaattTTTTTg | 3841 | |
| 3842 | tagagatgggatctcactgtgttgcccaggctgggtctcgaactcctggcttcaagtaatc | 3901 | |
| 3902 | ctcctgccttgtccttccaaagcactgggattctaaagtgtgagccaccacacctggcctg | 3961 | |
| 3962 | gagtatctaataattgtataacataataatagtaatcataggtgatgtcattttattgagta | 4021 | |
| 4022 | cttagtatgtgctgagtgctctgctaagtctggtttagacattatctcagttaaccttcc | 4081 | |
| 4082 | tgggtgcccccaagatggatattgttacctccattttctcctaggaagaaacggacttgg | 4141 | |
| 4142 | gggggatgattaggtatttctgtagatgtctattctgtaccatcctgcactaggccctgt | 4201 | |

¹NCBI Gene (National Center for Biotechnology Information) entry on FAM227A
[https://www.ncbi.nlm.nih.gov/gene/646851].

4202 gaatacagagataaataaagacacagtcacctgaccttatggggctcacaatctggaaaaa 4261
 4262 agagaaggatgtgtaaaccaataaatgcattaatgctccgatagaaagctgcggtggaatc 4321
 4322 tgagaaaaaccaaggcagatgaagccagtggtccagcagcccttggggacagaagatatt 4381
 4382 tcaactgaggggacagggcacaggggttgggttgccaaaggaccagcagctgggctgaagg 4441
 4442 gcataggttttatcatttgagcttcaaggcacaaggcagtgacctgggtctgtgctagaac 4501
 4502 agttcacctgtcacagccaagaggaaagaaatggtgcagatggctggttggccaaaccaa 4561
 4562 gcagcagataagcagatcctgggaaatgtagctcatccctcagacacacatctttacttg 4621
 4622 aatcctgagtagaactctaggtgaccccttggaggctattactcatgtaaaaggggatg 4681
 4682 aaggaaaggtaagagagaaggagcttaggcttggcatgagaaaatttgggcctttgaat 4741
 4742 ccctgccctgcttcaccatattggatgtgtgactcagcatagtagctgtgcatcttgacct 4801
 4802 ttctgaacgtgctttcttgactgcagaaaggggaatgcctgcctaggagggttgttgtgag 4861
 4862 gattagatgagataatttgtgcaaagttcttggcacagtagcttttcaactttgtaattgcc 4921
 4922 acaagctgttattgttattgtgctgtataaagtgtactcttcttggccgggtgcagtg 4981
 4982 gctcatgcctgtaatcccagcacttggggaggccaaggcaggtggatcgctgaggtcag 5041
 5042 gagtttgagaccagcctggccaacgtggcgaaactccatctctactaaaaatacaaaaaa 5101
 5102 attagccgggcacaatggcaggtgcctgtaacctcagctactcaggaggctgaggcagga 5161
 5162 gaatcacttgaaccggggaggtggaggatgcagtgagctgagattgcaccattgcactcc 5221
 5222 agcctgggtaacaagagtgaactccatctcaaaaaaaaaaaaaaaaaaagtatagtcttc 5281
 5282 tgaaccagaacgtgtgagcacctgcccaggtacaaggcaccatgtggggcagataagcag 5341
 5342 aacactctctcaccttcccttacta**C**ccccagccactgtcaactcttcatttgcagtttc 5401 A5367C
 5402 tctaggaaccacactttcctatttctggatcttttgtctgttctgctgcttctggacctgaa 5461
 5462 aatgccttctcctccctcctcttggtaactgccaacatcactaattcctgctcttctcctc 5521
 5522 **G**aggacccccgcttagacgtccctcatcttggggagccttccctaataataaccaggagcaagg 5581 A5323G
 5582 taggcacaagtgtctccactgcattatgctccaacagcattctgtgccatcccattatggc 5641
 5642 agcagttaccatagtagattggaattgcctgtctacctatccaccgctactattagcccc 5701
 5702 catacagcaagaaggtctccttattttctaagcccaggacaaaactgcatttctgtctgtc 5761
 5762 aggaccatttgttgcacagtcacaagatcatccctgcattggaccctttccagaaatgactg 5821
 5822 aggactcagagttgtagcctctcaggatgttaaataatgaagaaacctgtctctgcccctt 5881
 5882 gtaaaccattagaaggggaaaattatgggggaagaattatttggccctttataaggggaagcggg 5941
 5942 gtagagcatcaaaggggaactaacatttaaaaagcatttggctgtaatgtgggataaaagcaa 6001
 6002 atgagtaattgtatgatatttctaattctgtcattcccagtggtgctgaaaaccatactc 6061
 6062 tcagcatggaagaagataaattcagatgttaaactagaagagatgaagttaaaaatcctat 6121
 6122 agtccctgattttgaaattgcttatgaattgatgatgaaatgtatgttttagaacatacagt 6181
 6182 ttccctgaagaacaggagggatagctggagaggggataggaggggaagctggaaggggttac 6241
 6242 aaagaggcccaataaaacttttgggggtgacagatattgtctactatcttgattgtgggtga 6301
 6302 atggctcatgggtgtatacacacctaataacactttaaatgtgtgcagtttctcatatgt 6361
 6362 caattatacttcgataaaagctttgttaaaaaacgaacaggccagggcatggtggctcacac 6421
 6422 ctgtaatcccagcactttggaaggccaaggcaagaggattgcttgaggccaggagtttga 6481
 6482 gaccaaacaggacaacatagtgagaccttgcctctacaaaaacataaaaaattagtcgga 6541
 6542 tgtggtagtgacatacctatagtcctagctactagggaggctgaggtgggaggatcgcttg 6601
 6602 agcctgggagcttaaggctgccatgagctgtgattgtgctactagactcagcctggatga 6661
 6662 tagagcaagactgtgtctgggaaaaaaaaaaaaaaaaaacctgagccaggtgcggtggcta 6721
 6722 acgcctgtaatctcagcactttggggaggccgaggcgggtggattgcctgagaccagtagt 6781
 6782 ttgagaccagcctgaccaacatggcgaaatcctgtctctactcaaaatgcaaaattagcc 6841
 6842 ggggtgtgggtggcagctgcctgtagctccgggtactcgcaaggctgaggcaggagaa**T**tg 6901 T6898C
 6902 ttgaaccagggaagcggaggttacagtgagccaagatcatgccactgcactccagcctgg 6961
 6962 acaacacagtgagactctgtctcaaaaatattgtgtatataatttctaaaactctgtccac 7021
 7022 tgaatgacctagaaataaagactgacccggcagcagtgaccagactgtggctcttgaaa 7081
 7082 tactatttggcctaaaaggatctagggatccttgaagaaatgatcagttccaggtctagg 7141
 7142 gcaggaaaatcatgagacctgaaacatcttatcacacttaacaccaaggaagctatcaaa 7201
 7202 gacaaggatcctgtcagaaagacttggggagcaaaccttagagacaatcccattagctaaaa 7261
 7262 gagaggaccatttgggcattaataataattgccatatttgaagcacgtcaaactgttctc 7321
 7322 cacctgtaagttcatattgtgacttttaaaaaacggattgggtgtctggacgcgggtggctc 7381

¹NCBI Gene (National Center for Biotechnology Information) entry on FAM227A
 [https://www.ncbi.nlm.nih.gov/gene/646851].

| | | |
|-------|---|-------|
| 7382 | acgcctgtaatcccagcactttgggagggccgaggtgggcagatcacctgaggtcaggagt | 7441 |
| 7442 | ttgagaccagcctggccaacaaggcaaaatcccgtctctactaaaaatacaaaaatcagc | 7501 |
| 7502 | caggcgtgggtggtgcatgcctggaatcctagctattcgggagggccgagacacaagaatca | 7561 |
| 7562 | cttgaacttgggagggcggaggttacagtgagctgagatcgcaccactgcactccagccta | 7621 |
| 7622 | ggtgatggagtgagactgtctcaaagataaaaaaggaaaggggaaaggaggaaactaatt | 7681 |
| 7682 | ggatactaggaaacttcctcattatTTTTGAAAATTGGTAAGTAAATGAATAAGCATTAT | 7741 |
| 7742 | catgccattcccatatgaactgtattaccaggtaaccaaatagtagtggaacagaaactt | 7801 |
| 7802 | gtcttttagaaacaatccacctaataaattcagaaataatgatagacttAAAATATCACCA | 7861 |
| 7862 | TTTTGAAACCCCTAATGAATTAATGGATCTAGGTTGATTATCCATGGCTGCTTACATCAC | 7921 |
| 7922 | AAAAGACAAACAGCTATTAATGCCTTTTTGATACTAGACCATAAGACCACCTATCAAATA | 7981 |
| 7982 | gtcttacaataagtaaacttgaatgtgatctgaactctagatccaaccaccataacagg | 8041 |
| 8042 | aaatacagaggatggggacatcatggcaaatggtaaatacaccctaggggatgcaatcag | 8101 |
| 8102 | caaaatccaggccatggaaaactccagggcaaatgacttcattTTTTTCAACAAAATAAGT | 8161 |
| 8162 | ttcaagggaaaaagagaggggggaatatatagattaaaagagacttAAAAGAGGACATCGG | 8221 |
| 8222 | ttgccgagcatggtggcccatgcctgtaatcccagcactttaggaggccaaggtggaaga | 8281 |
| 8282 | acccttagagcccaggaggtgagaccaaaccgggtaacatagtgagaccttgtctctaca | 8341 |
| 8342 | aaaaaagtAAAAATTAGCAGAGCAAGGTGGCATA CGCCTGTAGTCCTAGCTACTTGGGAG | 8401 |
| 8402 | gctgacgtgggagaattgcttaagcctgggaggtggaggggtgcagtgagctatgatcatg | 8461 |
| 8462 | ccactgcacactccagcctaggtgacagaatgagaccacatctctAAAAAGAAAAA | 8521 |
| 8522 | agacatcaatcaattacaacatgtggacattatTTGGATCCCATGAAACAAAATGTGGC | 8581 |
| 8582 | atTTATGAGACAAAATGGATATCTGAATCTTAAATATTTTATATATAAAATTATTTCTAGGC | 8641 |
| 8642 | gtgataatagcattatgggtatTTTTTAAAGAGTTATCACATTTTAGAGATATATACT | 8701 |
| 8702 | gaaatattcacagatggaattacaagatTTTATGGAATTTGTACTCAAATAATATGGGAGA | 8761 |
| 8762 | gagaaagtggatggaggtataggtgaaacaagattgaccatgtgttgaaaattgTTGGAAG | 8821 |
| 8822 | atgggtgatgggaatattatactgTTTTACTTTTTGTGCATATTTGATTTTAGCCATAATT | 8881 |
| 8882 | TTTTAAATTAAGGCATCTACCATGGACACTTCTAAGCATATTTTACACACTTTTATTGT | 8941 |
| 8942 | ggctctactaaagccctgtgaatgaggtacaatttccccattttcaaattgaggetctt | 9001 |
| 9002 | cttgtTTAAAGCACCATTACTCCTGGCTTGGGACTTCTGTTATACAATATTCTCCTAGCA | 9061 |
| 9062 | ttctctttgccccttctctctgcccctccaatcagttctccacacaggagcccacatactt | 9121 |
| 9122 | catgtgtattaacccatttaattctcacaactcagcgccgatattattcttggTTTTcag | 9181 |
| 9182 | ataccgaaactcaggcacagagaggttaaataattttcccaagaccacacagctagtGAA | 9241 |
| 9242 | tggctgaagtgtgctctatgtctggcttagttgctgctcctatgtgtaacttatgacagga | 9301 |
| 9302 | aaataaagtcaagatatgaatatacaagcctgccatataagtggTTTTagcatgtcagTTAA | 9361 |
| 9362 | gagcatggtcactggagccagactgtgagcctcaggcaagttacttaacctcctgggtgcc | 9421 |
| 9422 | ccagttccatcgtgtaaataggggtgataattgTTGTGCCTCATGGTGTCTGTGTGAGGA | 9481 |
| 9482 | gtggatgcatgaatctgtgggagggcacttagaacagtgacctgacacatggtaagtgcagc | 9541 |
| 9542 | atgtactggctatcatgatcattatTTGGTGTTCAAACAAAATACTCGTTCCTTTTGGCCTC | 9601 |
| 9602 | tctcctTTAATTTGAAATTAATACTCCACCAGAACCCTTGCAGTTCCCCAAAATAAG | 9661 |
| 9662 | cctctgtgttccttctgcctttcccgcctgcccgattgacaaatcctcactgatccagc | 9721 |
| 9722 | cccaagctaagggccaccatccccgcaacccagagagagcctctgcttgggttcccagct | 9781 |
| 9782 | gcatgtctaataccctctcatcctgccttgtgtgggtgattatctctttctgcattgtcttc | 9841 |
| 9842 | tctactagactcatggctccttgagggcaggtacctacctgtctttatatccagcagaga | 9901 |
| 9902 | cgtggaattgagcagtggtgaataaatgctagtaaaataaactgtcatagcaagcctctc | 9961 |
| 9962 | ttggacacctatgtgctgaagttaaaaagtTTTTCAAATTTGGACTGAAAAATGAGAAA | 10021 |
| 10022 | gccccaaatgactattaaatatacatgtatgtgtgtgtatatacacacagctcatgcac | 10081 |
| 10082 | cacgtaacgatgtttcagtcagcagctgactgaatatatgacgggtgggtcccataagatta | 10141 |
| 10142 | taatggaactaaacaattcctatcacctagcagactcttagccttcgtaatgtcatagcgt | 10201 |
| 10202 | aacgcattagtcacgtgtttgtgggtgatgttgggtgtgaacaaatgtactgtgttgccctgc | 10261 |
| 10262 | cagtcataataaaatatagtacacaatactggggtaatggtaataaataatgactgttactgg | 10321 |
| 10322 | t 10322 | |

T7803C






T9238C

polyA tail A10306G

¹NCBI Gene (National Center for Biotechnology Information) entry on FAM227A [https://www.ncbi.nlm.nih.gov/gene/646851].

| mRNA and Protein(s) | |
|--|--|
| 1. NM_001013647.1 → NP_001013669.1 protein FAM227A isoform 1 | |
| See identical proteins and their annotated locations for NP_001013669.1 | |
| Status: VALIDATED | |
| Description | Transcript Variant: This variant (1) represents the shorter transcript and encodes the longer isoform (1). |
| Source sequence(s) | AK301819 , AL022320 , DA378202 , DB053353 , DV080205 |
| UniProtKB/Swiss-Prot | F5H4B4 |
| Related | ENSP00000445093 , ENST00000535113 |
| Conserved Domains (1) summary | |
| | pfam14922 FWWh; Protein of unknown function Location:135 → 296 |
| 2. NM_001291030.1 → NP_001277959.1 protein FAM227A isoform 2 | |
| Status: VALIDATED | |
| Description | Transcript Variant: This variant (2) uses an alternate splice site in the 5' region and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) has a distinct N-terminus and is shorter than isoform 1. |
| Source sequence(s) | AK301819 , AL022320 , DA378202 , DV080205 |
| UniProtKB/Swiss-Prot | F5H4B4 |
| Conserved Domains (1) summary | |
| | pfam14922 FWWh; Protein of unknown function Location:42 → 203 |

Figure 3: Two Isoforms of FAM227A. Isoform 1 is longer than isoform 2 and was thus transcribed¹.

| | |
|---|-------------------------|
|  | =Base/A.A. Change |
|  | =Base Change Common |
|  | =Start of Transcription |
|  | =Helix |
|  | =Sheet |
| Yellow highlighted base=highly conserved | |
| Yellow highlighted base and A.A.=phosphorylation site | |
| Light green highlight=FWWh region | |
| Dark blue font=exon | |
| Light blue font=polyA tail | |

¹NCBI Gene (National Center for Biotechnology Information) entry on FAM227A
[<https://www.ncbi.nlm.nih.gov/gene/646851>].