5 Prime RACE Sequence

GCGCGGGGCCCGGGGCCGGGGGCGGCGGCGGCCCCTCGCAGCAGCTGGCCGGCGGGCCCCCCCAGCAGTTCGCGCTCTCCAAGTCCGCGGCCATCCGGGCCGAGATCCAGCGCTTCGAGTCCGTGCATCCCAATATCTACGCCATCTACGACCTGATCGAGCGCATCGAGGATTTGGCGCTGCAGAACCAGATCCGGGAGCACGTCATCTCCATCGAGGACTCGTTTGTGAACAGCCAGGAGTGGACGCTGAGCCGCTCCGTACCGGAGCTTAAAGTGGGCATAGTGGGGAACCTGTCTAGCGGGAAGTCAGCCCTGGTGCACCGCTATCTGACGGGGACCTATGTCCAGGAGGAGTCCCCTGAAGGGGGGCGGTTTAAGAAGGAGATTGTGGTGGATGGCCAGAGTTACCTGCTGCTGATCCGAGATGAAGGAGGCCCCCCTGAGCTCCAGTTTGCTGCCTGGGTGGATGCAGTGGTGTTTGTGTTCAGCCTGGAGGATGAAATCAGTTTCCAGACGGTGTACAACTACTTCCTGCGTCTCTGCAGCTTCCGCAACGCCAGCGAGGTGCCCATGGTGCTTGTGGGCACGCAGGATGCCATCAGCGCTGCGAATCCCCGGGTTATCGACGACAGCAGAGCCCGCAAGCTCTCCACAGATCTGAAGCGGTGCACCTACTATGAGACGTGCGCGACCTACGGGCTCAATGTGGAGCGTGTCTTCCAGGACGTGGCCCAGAAGGTAGTGGCCTTGCGAAAGAAGCAGCAACTGGCCATCGGGCCCTGCAAGTCACTGCCCAACTCGCCCAGCCACTCGGCCGTGTCCGCCGCCTCCATCCCGGCCGTGCACATCAACCAGGCCACGAATGGCGGCGGCAGCGCCTTCAGCGACTACTCGTCCTCAGTCCCCTCCACCCCCAGCATCAGCCAGCGGGAGCTGCGCATCGAGACCATCGCTGCCTCCTCCACCCCCACACCCATCCGAAAGCAGTCCAAGCGGCGCTCCAACATCTTCACGCTAATGAACCGGCGGC

Alignment of Translated 5 Prime Race Sequence with Protein NP\_001036000.1 (AGAP3 isoform B)

Query 1 AGPGAGGGGGPSQQLAGGPPQQFALSKSAAIRAEIQRFESVHPNIYAIYDLIERIEDLAL 60

AGPGAGGGGGPSQQLAGGPPQQFALS SAAIRAEIQRFESVHPNIYAIYDLIERIEDLAL

Sbjct 39 AGPGAGGGGGPSQQLAGGPPQQFALSNSAAIRAEIQRFESVHPNIYAIYDLIERIEDLAL 98

Query 61 QNQIREHVISIEDSFVNSQEWTLSRSVPELKVGIVGNLSSGKSALVHRYLTGTYVQEESP 120

QNQIREHVISIEDSFVNSQEWTLSRSVPELKVGIVGNLSSGKSALVHRYLTGTYVQEESP

Sbjct 99 QNQIREHVISIEDSFVNSQEWTLSRSVPELKVGIVGNLSSGKSALVHRYLTGTYVQEESP 158

Query 121 EGGRFKKEIVVDGQSYLLLIRDEGGPPELQFAAWVDAVVFVFSLEDEISFQTVYNYFLRL 180

EGGRFKKEIVVDGQSYLLLIRDEGGPPELQFAAWVDAVVFVFSLEDEISFQTVYNYFLRL

Sbjct 159 EGGRFKKEIVVDGQSYLLLIRDEGGPPELQFAAWVDAVVFVFSLEDEISFQTVYNYFLRL 218

Query 181 CSFRNASEVPMVLVGTQDAISAANPRVIDDSRARKLSTDLKRCTYYETCATYGLNVERVF 240

CSFRNASEVPMVLVGTQDAISAANPRVIDDSRARKLSTDLKRCTYYETCATYGLNVERVF

Sbjct 219 CSFRNASEVPMVLVGTQDAISAANPRVIDDSRARKLSTDLKRCTYYETCATYGLNVERVF 278

Query 241 QDVAQKVVALRKKQQLAIGPCKSLPNSPSHSAVSAASIPAVHINQATNGGGSAFSDYSSS 300

QDVAQKVVALRKKQQLAIGPCKSLPNSPSHSAVSAASIPAVHINQATNGGGSAFSDYSSS

Sbjct 279 QDVAQKVVALRKKQQLAIGPCKSLPNSPSHSAVSAASIPAVHINQATNGGGSAFSDYSSS 338

Query 301 VPSTPSISQRELRIETIAASSTPTPIRKQSKRRSNIFTLMNRR

VPSTPSISQRELRIETIAASSTPTPIRKQSKRRSNIFT-----

Sbjct 339 VPSTPSISQRELRIETIAASSTPTPIRKQSKRRSNIFT-----

3 Prime RACE Sequence

CAGAGGGTTAGCTGGCCCAGCTAGAGTCAGAGCCCAGGCCTCCCCGTCGCCTTCCGGCTCTTTTTCCGTTACCCCACTGCCGAGGGGAAAATTCATGCTTTCCACCCACCGCTGTGATTGGTTTAACAAAGGCTTAGCCATCTTTTCCTGGGCTTCACCACGCTGCCTCGTTCCTCCCTCTCAGATATGTGCCACTGTTTCCAACTTTTCATCAACAAAAAGGCCTTTCCAACTCCTTCCAAATTAGAAGACCAGTTGGTGACACACAGCACCTCTGGACATGCCCCCTGTGCGGGGCCGGAGGCGGGCCGGGCCCTGGGACTGCTCTCAGATGAGAAGCGGCCGCCGAGCTCCCCACTCCAGAGACCCACGGGAACCTTTGTAACTAACCCCACCCCCAGGGAAGGCTAGGAGCGCCGGAGCCCGCGCTGGGGGCTGCCGGGGACCAGGCCCGGCCGGACGCTGCAGGCTCGCTGCATGGAGAAGAAGGCAGCTCGGCCCCACGCCCGGCGCTGGCCAGCGCGACGAGGCCCAGAGGGGCGGGGGAGTCCAAGCCCGCCCGGCCCGGCTGCTCCTGGGGGGCGCTTTCCTGCCCCTCCCCTCCTCTGCTCCTTCCTGCATGGACCTCTGCCGTTCCTGCTCCTGCTCCGGAAGCCGCCGCCGCCGCCGCGCTTGCCTTGCCCCCTCTTTTTGGCCTCCCCCTATTTCCTAGGATCCGCATTCGGGTGGACTCTGCCCCAGGAGCTTGACAGGGTGCAGGGCCTCTTCTGGCCTCTCTCCTCTCTCTGTCCATCCACTGTGCCCCTTGGGCCACGCCGACGCGCTCGGTGCCACGTGCCGTGTGGTGTCTGTGCCGCAGACGGGCCATCTGCCCGCTCACTTGTGGACTTTGCGCTCCCGGTTGTCGCGCCCTGTGCTCCCGACCAGCAGCCCCACCGTCCACCTCCTCGCCCCCGCTTCTCTTACGCCCCCGCCCCGGGCGTGCTCCTCGCGCCCTCGGCCTCTCTGTCCTTGCTCTTTTGTAAGGGGCGGGCCCGGCTCAGTGACCTGTGCTGCTCTGTATGGTGCCGTGTGTAAGAATAAACCCGTTGGAATAC

Alignment of Translated 3 Prime Race Sequence with XP\_016867224.1/ XP\_005250000 (aa 32-61) and Protein NP\_001036000.1 (aa 62-81)

Query 1 RGLAGPARVRAQASPSPSGSFSVTPLPRGKFMLSTHRCDWFNKGLAIFSWASPRCLVPPSQ 61

-------------------------------MLSTHRCDWFNKGLAIFSWASPRCLVPPSQ

Sbjct 1 -------------------------------MLSTHRCDWFNKGLAIFSWASPRCLVPPSQ 30

Query 62 ICATVSNFSSTKRPFQLLPN 81

ICATVSNFSSTKRPFQLLPN

Sbjct 377 ICATVSNFSSTKRPFQLLPN 396