



COPA (NM_004371.4) - cDNA - 2025-04-03

GTCGCTGACG TGGAGGCGTC CGAAGGGCAG CAGGGTGTGT CGGGGCTCGG -31
ATTAAGACAT CGGAGTCGGA GACCTGAGAG **ATGTTAACCA** AATTCGAGAC 20
CAAGAGCGCG CGGGTCAAAG GGCTCAGCTT TCACCCCAA AGACCTTGA 70
TCCTGACTAG TTTACATAAT GGGGTCATCC AGTTATGGGA CTATCGGATG 120
TGCACCTCA TTGACAAGTT TGATGAACAT GATGGTCCAG **TGCGAGGCAT** 170 [p.G56S](#)
TGACTTCCAT AAGCAGCAGC CACTGTTCGT CTCTGGAGGA GATGACTATA 220
AGATTAAGGT TTGGAATTAC AAGCTTCGGC GCTGTCTTTT CACATTGCTT 270
GGGCACCTAG ATTATATTCG CACCACGTTT TTTCATCATG **AATATCCCTG** 320
GATTCTGAGT GCCTCCGATG ATCAGACCAT CCGAGTGTGG **AACTGGCAAT** 370
CTAGAACCTG TGTTTGTGTG TTAACAGGGC ACAACCATA TGTGATGTGT 420
GCTCAGTTC ACCCCACAGA AGACTTGTA GTATCAGCCA GCCTGGACCA 470
GACTGTGCGC GTTTGGGATA TTTCTGGTCT **GAGGAAAAA AACCTGTCCC** 520
CTGGTGGGT GGAATCGGAT GTGAGAGGAA TAACTGGGGT TGATCTATTT 570
GGAACACAG ATGCAGTGGT **GAAGCATGTA** CTAGAGGGTC ACGATCGTGG 620 [p.H199R](#)
AGTAACTGG **GCTGCCTTCC** ACCCCACTAT GCCCCTTATT GTATCTGGGG 670 [p.A211V](#)
CAGATGAT**CG** TCAAGTGAAG ATCTGGCG**CA** TGAATGAATC **AAAGGCATGG** 720 [p.R227C](#) [p.K230N](#) [p.R233H](#) [p.R233L](#) [p.K238E](#) [p.A239P](#) [p.W240R](#) [p.W240L](#) [p.W240S](#)
GAGGTTGATA CCTGCCGGG CCATTACAAC AATGTATCTT GTGCCGTCTT 770 [p.E241K](#) [p.E241A](#) [E241D](#) [p.V242G](#) [p.D243N](#) [p.D243G](#)
CCACCCTCGC CAAGAGT**TGA** TCCTCAGCAA TTCTGAGGAC AAGAGTATTC 820 [L263S](#)
GAGTCTGGGA TATGTCTAAG **CGGACTGGGG** TTCAG**ACTTT** CCGCAGAGAC 870 [p.R281W](#) [p.Q285H](#)
CATGATCGTT TCTGGGTCCT AGCTGCTCAC CCTAACCTTA ACCTCTTTGC 920
AGCAGGCCAT GATGGTGGTA TGATTGTGTT TAAGCTGGAA CGGGAACGGC 970
CAGCCTATGC TGTTATGGC AATATGCTAC ACTATGTCAA GGACC**GATTC** 1020 [p.R339Q](#)

TTACGACAGC TGGATTTCAA CAGCTCCAAA GATGTAGCTG TGATGCAGTT 1070
GCGGAGTGGT TCCAAGTTTC CAGTATTCAA TATGTCATAC AATCCAGCAG 1120 [p.Y370S](#)
AAAATGCAGT CCTGCCTTGT ACAAGAGCTA GCAATCTAGA GAATAGTACC 1170
TATGACCCTGT ACACCATCCC TAAAGATGCT GACTCCCAGA ATCCTGATGC 1220
GCCCTGAAGGG AAACGATCCT CAGGCCTGAC AGCCGTTTGG GTCGCTCGAA 1270 [p.P408S](#)
ATCGGTTTGC TGTCCTAGAT CGGATGCATT CGCTTCTGAT CAAGAATCTG 1320
AAGAATGAGA TCACCAAAAA GGTACAGGTG CCCAACTGTG ATGAGATCTT 1370
CTATGCTGGC ACAGGCAATC TCCTGCTTCG AGATGCGGAC TCTATCACAC 1420
TCTTTGACGT ACAGCAGAAG CGGACTCTGG CATCTGTGAA GATTTCTAAA 1470
GTGAAATACG TTATCTGGTC AGCAGACATG TCACATGTAG CACTACTAGC 1520
CAAACACGCC ATTGTGATCT GTAACCGCAA ACTGGATGCT TTATGTAACA 1570 [p.D519Y](#)
TTCATGAGAA CATTCTGTGC AAGAGTGGGG CCTGGGATGA GAGTGGGGTA 1620
TTTATCTATA CCACAAGCAA CCACATCAA TATGCTGTCA CCACTGGGGA 1670
CCACGGGATC ATTGGAATC TGGATTTACC CATCTATGTC ACACGGGTGA 1720
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CTATTATTGC TTATCTCCAG AAGAAGGGCT ATCCTGAAGT GGCACCTGCAT 1920
TTTGTCAAGG ATGAGAAAAC TCGCTTTAGT CTGGCACTGG AGTGTGGAAA 1970
CATTGAGATT GCTCTGGAAG CAGCCAAAGC ACTGGATGAC AAGAAGTACT 2020
GGGAAAAGCT GGGAGAAGTG GCCCTGCTGC AGGGGAACCA CCAGATTGTG 2070
GAAATGTGCT ATCAGCGTAC CAAAACTTT GACAACTTT CCTTCCTGTA 2120 [T697I](#)
TCTTATCACT GGCAACTTAG AAAAATTCG CAAGATGATG AAGATTGCTG 2170
AGATCAGAAA GGACATGAGT GGCCACTATC AGAATGCCCT ATACCTGGGT 2220
GATGTGTCAG AGCGTGTGCG GATCCTGAAG AACTGTGGAC AGAAGTCCCT 2270
GGCCTATCTC ACAGCTGCTA CCCATGGCTT AGATGAAGAA GCTGAGAGCC 2320
TAAAGGAGAC ATTTGACCCA GAGAAGGAGA CAATCCCAGA CATTGACCCT 2370
AATGCCAAGC TGCTCCAGCC ACCTGCACCT ATCATGCCAT TGGATACCA 2420 [p.Asn807Thr](#)

TTGGCCTTTA TTGACTGTAT CCAAAGGATT TTTTGAAGGC ACCATTGCCA 2470
GCAAAGGGAA GGGAGGAGCA CTGGCTGCTG ACATTGACAT TGACACTGTT 2520 P.G828E
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GGGCTGAAGA ATGGTGTACC AGCTGTGGGC CTGAAGCTTA ATGACCTCAT 3020
CCAACGGTTG CAGCTGTGCT ACCAGCTCAC CACAGTTGGC AAATTTGAGG 3070 P.C1013S
AGGCTGTGGA AAAATTCCTG TCCATCCTTC TCAGTGTGCC ACTTCTTGTT 3120
GTGGACAATA AACAAGAGAT TGCAGAGGCC CAGCAGCTCA TCACCATTTG 3170
CCGTGAGTAC ATTGTGGGTT TGTCCGTGGA GACAGAAAGG AAGAAGCTGC 3220 P.R1058C
CCAAAGAGAC TCTAGAACAG CAGAAGCGCA TCTGTGAGAT GGCAGCCTAT 3270
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ACCCGAAAAA TCCTGTCTGC CTGTGAGAAG AATCCCACAG ATGCCTACCA 3470 P.R1142X
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AGAATGTGTC TATATCCTCC TTCTAACAGC ACCTTCCCCC TGCAGCTACT *95
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ATGGAATC CGAAGGCTA AACTTGACTT TTTTGAGGTC TTCTCAACTT *195
GACTACAGTT GTGCTCATAA TTGTCCCTGC CTTTCCAGCT TAATTATTTT *245
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CCCAGCACTT TGGGAGGCTA CGGTGGGCAG ATCATCTGAG GCCAGGAGTT *345
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TCCCTTCAGT ATTTATCCCT CCTTCCCA CAGCAGCTTT CTTCCCTGTC *645
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ATATGCTAAG AATAATTGGG TAGAGTGACA TTAGTGTGCC TTCGATTAAA *1495
ATAAGTACTT TTTTGCCTGT TAAATTCATG TTTTCAATAA ATAATAAATG *1545

CATATAGTTG AAAAATCA

COPA (NM_004371.4) - cDNA - 2025-04-03

