

Allelic Phenotype Values (APV) and Phenotype Association of PAH Variations

| Variant | cDNA | APV | Phenotype |
|----------------------|----------------------------------|-----|-------------|
| p.PAHdel | c.-27778delPAH | 0 | classic PKU |
| p.(Met1Val) | c.1A>G | 0 | classic PKU |
| p.(Met1Leu) | c.1A>T | 0 | classic PKU |
| p.? / Ex1_2del | c.1-?_168+?del | 0 | classic PKU |
| p.? / Ex1del | c.1-?_60+?del | 0 | classic PKU |
| p.? / Ex1_3del | c.(1-1393_1-405)_(352+33_370)del | 0 | classic PKU |
| p.(Met1Arg) | c.2T>G | 0 | classic PKU |
| p.(Met1Thr) | c.2T>C | 0 | classic PKU |
| p.(Met1Ile) | c.3G>A | 0 | classic PKU |
| p.(Val5SerfsTer33) | c.13del | 0 | classic PKU |
| p.(Asn8IlefsTer30) | c.23_24delinsT | 0 | classic PKU |
| p.(Arg13GlnfsTer5) | c.30dup | 0 | classic PKU |
| p.(Leu15GlnfsTer24) | c.43_44insAG | 0 | classic PKU |
| p.(Ser16Ter) | c.47_48del | 0 | classic PKU |
| p.(Asp17LeufsTer22) | c.47_48dupCT | 0 | classic PKU |
| p.(Asp17Ter) | c.48dupT | 0 | classic PKU |
| p.(Gln20LysfsTer17) | c.57_60+1delACAGG/delACAGG | 0 | classic PKU |
| p.(Gln20Ter) | c.58C>T | 0 | classic PKU |
| p.(Gln20ProfsTer7) | c.59delinsCC | 0 | classic PKU |
| p.? / IVS1+5G>A | c.60+5G>A | 0 | classic PKU |
| p.? / IVS1+5G>T | c.60+5G>T | 0 | classic PKU |
| p.? / IVS1+5G>C | c.60+5G>C | 0 | classic PKU |
| p.? / IVS1+4A>T | c.60+4A>T | 0 | classic PKU |
| p.? / IVS1+5_+6delGC | c.60+5_60+6del | 0 | classic PKU |
| p.? / IVS1-13del9 | c.61-13del9 | 0 | classic PKU |
| p.(Glu26LeufsTer13) | c.73_74dup | 0 | classic PKU |
| p.(Ile25MetfsTer13) | c.75delIT | 0 | classic PKU |
| p.(Cys29Ter) | c.87C>A | 0 | classic PKU |
| p.(Ser36Ter) | c.107C>A | 0 | classic PKU |
| p.(Ile38AspfsTer19) | c.111dupG | 0 | classic PKU |
| p.(Ser40Leu) | c.119C>T | 0 | classic PKU |
| p.Leu41Phe | c.121C>T | 0 | classic PKU |
| p.(Lys42del) | c.124_126del | 0 | classic PKU |

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| p.(Glu43Ter) | c.127G>T | 0 | classic PKU |
| p.(Gly46ValfsTer15) | c.137del | 0 | classic PKU |
| p.(Leu52CysfsTer9) | c.155delT | 0 | classic PKU |
| p.(Phe55del) | c.163_165delTTT | 0 | classic PKU |
| p.(Phe55LeufsTer6) | c.165delT | 0 | classic PKU |
| p.(Glu56Asp) | c.168G>T | 0 | classic PKU |
| p.(Glu57ArgfsTer3) | c.168_168+1delinsAA | 0 | classic PKU |
| p.? / IVS2+1G>A | c.168+1G>A | 0 | classic PKU |
| p.? / IVS2+5G>A | c.168+5G>A | 0 | classic PKU |
| p.? / IVS2+5G>C | c.168+5G>C | 0 | classic PKU |
| p.? / IVS2+5G>T | c.168+5G>T | 0 | classic PKU |
| p.? / IVS2+6T>G | c.168+6T>G | 0 | classic PKU |
| p.? / IVS2-13T>G | c.169-13T>G | 0 | classic PKU |
| p.(Glu57CysfsTer77) | c.169_352del | 0 | classic PKU |
| p.(Glu57Ter) | c.169G>T | 0 | classic PKU |
| p.? / Ex3del | c.169_4951del6604ins8 | 0 | classic PKU |
| p.(Asn58Ter) | c.169_170del | 0 | classic PKU |
| p.? / Ex3del4765 | c.169_352del184 | 0 | classic PKU |
| p.(Asn58Ter) | c.171_172delGA | 0 | classic PKU |
| p.(Leu62Ter) | c.184delC | 0 | classic PKU |
| p.(Leu62ProfsTer7) | c.184_187insCTGA | 0 | classic PKU |
| p.(Leu62ProfsTer3) | c.185_189delTGACC | 0 | classic PKU |
| p.(His64AspfsTer4) | c.185_188dupTGAC | 0 | classic PKU |
| p.(His64ProfsTer10) | c.189_190dupTGAC | 0 | classic PKU |
| p.(His64ThrfsTer9) | c.190delC | 0 | classic PKU |
| p.(His64Ter) | c.190_194delCACAT | 0 | classic PKU |
| p.(Ile65LysfsTer9) | c.194_201delTTGAATCT | 0 | classic PKU |
| p.(Glu66Ter) | c.196G>T | 0 | classic PKU |
| p.(Glu66AlafsTer8) | c.197_204delGAACCGTG | 0 | classic PKU |
| p.(Pro69_Ser70dup) | c.205_210dup | 0 | classic PKU |
| p.(Ser70PhefsTer7) | c.206dupC | 0 | classic PKU |
| p.Ser70Pro | c.208T>C | 0 | classic PKU |
| p.(Ser70del) | c.208_210delTCT | 0 | classic PKU |
| p.(Glu76Ter) | c.226G>T | 0 | classic PKU |
| p.(Tyr77Ter) | c.231T>G | 0 | classic PKU |

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|----------------------|-------------------|---|-------------|
| p.(Glu78PhefsTer13) | c.232_235delGAAT | 0 | classic PKU |
| p.(Phe79IlefsTer7) | c.234dup | 0 | classic PKU |
| p.(Thr81ValfsTer6) | c.241_256del16 | 0 | classic PKU |
| p.(Leu83Trpfs*9) | c.248del | 0 | classic PKU |
| p.(Lys85Ter) | c.253A>T | 0 | classic PKU |
| p.(Ala90CysfsTer12) | c.266dup | 0 | classic PKU |
| p.(Ala90CysfsTer12) | c.266_267insG | 0 | classic PKU |
| p.(Asn93SerfsTer5) | c.277_280delAACA | 0 | classic PKU |
| p.(Asn93LysfsTer5) | c.279-282delCATC | 0 | classic PKU |
| p.(Ile94SerfsTer4) | c.280_283delATCA | 0 | classic PKU |
| p.(Ala104_Val106del) | c.310_318del | 0 | classic PKU |
| p.(Glu108Ter) | c.322G>T | 0 | classic PKU |
| p.(Glu108AspfsTer4) | c.324_328delGCTTT | 0 | classic PKU |
| p.(Arg111Ter) | c.331C>T | 0 | classic PKU |
| p.Asp112GlufsTer2 | c.335dupA | 0 | classic PKU |
| p.Lys113ArgfsTer81 | c.337_340delAAGA | 0 | classic PKU |
| p.(Lys115ArgfsTer81) | c.338_341delAGAA | 0 | classic PKU |
| p.(Lys115ThrfsTer79) | c.344_347delAAGA | 0 | classic PKU |
| p.(Asp116HisfsTer29) | c.346_347delGA | 0 | classic PKU |
| p.(Thr117LysfsTer78) | c.350delC | 0 | classic PKU |
| p.? / IVS3+1G>A | c.352+1G>A | 0 | classic PKU |
| p.? / IVS3-1G>A | c.353-1G>A | 0 | classic PKU |
| p.? / Ex4_8del | c.353-?_912+?del | 0 | classic PKU |
| p.? / IVS3-2A>G | c.353-2A>G | 0 | classic PKU |
| p.(Trp120GlyfsTer75) | c.358delT | 0 | classic PKU |
| p.(Trp120Ter) | c.359G>A | 0 | classic PKU |
| p.Pro122Gln | c.365C>A | 0 | classic PKU |
| p.(Asn133ArgfsTer61) | c.398_401delATCA | 0 | classic PKU |
| p.(Gln134Ter) | c.400C>T | 0 | classic PKU |
| p.(Pro147Ser) | c.439C>T | 0 | classic PKU |
| p.? / IVS4+1G>A | c.441+1G>A | 0 | classic PKU |
| p.? / IVS4+2T>G | c.441+2T>G | 0 | classic PKU |
| p.? / IVS4+2T>A | c.441+2T>A | 0 | classic PKU |
| p.? / IVS4+3G>C | c.441+3G>C | 0 | classic PKU |
| p.? / IVS4+4A>G | c.441+4A>G | 0 | classic PKU |

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|------------------------|----------------------------------|---|-------------|
| p.? / IVS4+5G>T | c.441+5G>T | 0 | classic PKU |
| p.? / IVS4+6T>C | c.441+6T>C | 0 | classic PKU |
| p.? / IVS4+6T>A | c.441+6T>A | 0 | classic PKU |
| p.? / IVS4+1G>C | c.441+1G>C | 0 | classic PKU |
| p.(Gly148_Gln304del) | c.442+?_842-? | 0 | classic PKU |
| p.? / IVS4-2A>C | c.442-2A>C | 0 | classic PKU |
| p.? / IVS4-1G>A | c.442-1G>A | 0 | classic PKU |
| p.(Gly148TrpfsTer29) | c.442-2914_509+1173del4155ins268 | 0 | classic PKU |
| p.(Gly148LeufsTer105) | c.442-?_706+?del | 0 | classic PKU |
| p.? / Ex5del4232ins268 | c.442_509del168 | 0 | classic PKU |
| p.? / Ex5del | c.442_1556del1881 | 0 | classic PKU |
| p.? / Ex5del | c.? | 0 | classic PKU |
| p.? / Ex5_Ex6del | g.11653bpdel | 0 | classic PKU |
| p.(Pro152LeufsTer43) | c.453_453delT | 0 | classic PKU |
| p.(Arg155LeufsTer43) | c.456_463dupTGTGTACC | 0 | classic PKU |
| p.? / Ex5_Ex6del | c.456_706+138del11653 | 0 | classic PKU |
| p.(Tyr154His) | c.460T>C | 0 | classic PKU |
| p.(Tyr154Ter) | c.462C>A | 0 | classic PKU |
| p.(Arg155ValfsTer40) | c.463delC | 0 | classic PKU |
| p.(Arg155Pro) | c.464G>C | 0 | classic PKU |
| p.(Ala156Pro) | c.466G>C | 0 | classic PKU |
| p.(Arg157Lys) | c.470G>A | 0 | classic PKU |
| p.(Arg157Ser) | c.471A>C | 0 | classic PKU |
| p.(Arg158Trp) | c.472C>T | 0 | classic PKU |
| p.Arg158Gln | c.473G>A | 0 | classic PKU |
| p.(Lys159Ter) | c.475A>T | 0 | classic PKU |
| p.(Gln160Ter) | c.478C>T | 0 | classic PKU |
| p.(Ala165ValfsTer35) | c.493_494insT | 0 | classic PKU |
| p.(Tyr166Ter) | c.498C>A | 0 | classic PKU |
| p.(Tyr166Ter) | c.498C>G | 0 | classic PKU |
| p.(Tyr168SerfsTer27) | c.503delA | 0 | classic PKU |
| p.(Tyr168Ter) | c.504C>A | 0 | classic PKU |
| p.(Arg169ProfsTer26) | c.506del | 0 | classic PKU |
| p.? / IVS5+1delG | c.509+1delG | 0 | classic PKU |
| p.? / IVS5+1G>A | c.509+1G>A | 0 | classic PKU |

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| p.? / IVS5+5delG | c.509+5delG | 0 | classic PKU |
| p.? / Ex6del7831 | c.509+4140_706+510del7831 | 0 | classic PKU |
| p.? / IVS5-6T>G | c.510-6T>G | 0 | classic PKU |
| p.? / IVS5-6T>A | c.510-6T>A | 0 | classic PKU |
| p.? / IVS5-2A>G | c.510-2A>G | 0 | classic PKU |
| p.(Gly171LeufsTer46) | c.510-?_706+?del | 0 | classic PKU |
| p.(His170Gln) | c.510T>A | 0 | classic PKU |
| p.(Thr236MetfsTer25) | c.510_706dup197 | 0 | classic PKU |
| p.(?) / Ex6_7_8del | c.? | 0 | classic PKU |
| p.? / EX6del7793 | c.510-6708_706 + 888del7793insGG | 0 | classic PKU |
| p.(Gln172Ter) | c.514C>T | 0 | classic PKU |
| p.(Arg176Ter) | c.526C>T | 0 | classic PKU |
| p.(Tyr179His) | c.535T>C | 0 | classic PKU |
| p.(Met180lIefsTer18) | c.540_544del | 0 | classic PKU |
| p.(Glu181LysfsTer13) | c.541_544del | 0 | classic PKU |
| p.(Glu183del) | c.543_545delGGA | 0 | classic PKU |
| p.(Lys184ArgfsTer11) | c.551delA | 0 | classic PKU |
| p.(Thr186HisfsTer9) | c.556delA | 0 | classic PKU |
| p.(W187GlyfsTer8) | c.558delA | 0 | classic PKU |
| p.(W187GlyfsTer12) | c.558_559delAT | 0 | classic PKU |
| p.(Trp187Arg) | c.559T>C | 0 | classic PKU |
| p.(Trp187Ter) | c.560G>A | 0 | classic PKU |
| p.(Trp187Ter) | c.561G>A | 0 | classic PKU |
| p.(Gly188AlafsTer7) | c.563delG | 0 | classic PKU |
| p.(Val190Gly) | c.569T>G | 0 | classic PKU |
| p.(Leu194GlufsTer5) | c.580_581delCT | 0 | classic PKU |
| p.(Leu194AspfsTer6) | c.580delinsGA | 0 | classic PKU |
| p.(Ser196ValfsTer4) | c.584dup | 0 | classic PKU |
| p.(Ser196LeufsTer2) | c.586_608del23 | 0 | classic PKU |
| p.(Tyr198SerfsTer136) | c.590_611del22 | 0 | classic PKU |
| p.(Leu197Ter) | c.590T>A | 0 | classic PKU |
| p.(Tyr198ValfsTer9) | c.591_613del23 | 0 | classic PKU |
| p.(Tyr198SerfsTer136) | c.592_613del22 | 0 | classic PKU |
| p.(Tyr198CysfsTer136) | c.593_614del22 | 0 | classic PKU |
| p.(Tyr198Ter) | c.594T>G | 0 | classic PKU |

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|-----------------------|----------------------|---|-------------|
| p.(Thr200AsnfsTer6) | c.598dupA | 0 | classic PKU |
| p.(Cys203LeufsTer3) | c.607dupT | 0 | classic PKU |
| p.(Cys203Gly) | c.607T>G | 0 | classic PKU |
| p.(Cys203Ter) | c.609C>A | 0 | classic PKU |
| p.(?) / Ex6-96A>G | c.611A>G | 0 | classic PKU |
| p.(Tyr204*) | c.612T>G | 0 | classic PKU |
| p.(Glu205Lys) | c.613G>A | 0 | classic PKU |
| p.(Tyr206*) | c.618C>A | 0 | classic PKU |
| p.(Tyr206*) | c.618C>G | 0 | classic PKU |
| p.(Pro211HisfsTer130) | c.632delC | 0 | classic PKU |
| p.(Leu212Pro) | c.635T>C | 0 | classic PKU |
| p.(Glu214LysfsTer127) | c.636del | 0 | classic PKU |
| p.(Tyr216*) | c.648C>G | 0 | classic PKU |
| p.(Gly218AlafsTer123) | c.653delG | 0 | classic PKU |
| p.(Asp222Ter) | c.663_664delAG | 0 | classic PKU |
| p.(Asp222Ter) | c.664_665delGA | 0 | classic PKU |
| p.(Gln226ThrfsTer118) | c.667_674dup8 | 0 | classic PKU |
| p.(Gln226ThrfsTer118) | c.667_674dupAACATTCC | 0 | classic PKU |
| p.(Asn223LysfsTer118) | c.669delC | 0 | classic PKU |
| p.(Ile224Thr) | c.671T>C | 0 | classic PKU |
| p.(Pro225Thr) | c.673C>A | 0 | classic PKU |
| p.(Gln226Ter) | c.676C>T | 0 | classic PKU |
| p.(Gln226Lys) | c.676C>A | 0 | classic PKU |
| p.(Glu228Ter) | c.682G>T | 0 | classic PKU |
| p.(Asp229GlufsTer54) | c.686dup | 0 | classic PKU |
| p.(Ser231ValfsTer52) | c.690_691insG | 0 | classic PKU |
| p.(Ser231Pro) | c.691T>C | 0 | classic PKU |
| p.(Ser231Phe) | c.692C>T | 0 | classic PKU |
| p.(Gln232Ter) | c.694C>T | 0 | classic PKU |
| p.Gln235Ter | c.703C>T | 0 | classic PKU |
| p.? / IVS6-2A>G | c.707-2A>G | 0 | classic PKU |
| p.? / IVS6-1G>A | c.707-1G>A | 0 | classic PKU |
| p.(Thr236MetfsTer60) | c.707-2delA | 0 | classic PKU |
| p.(Thr238Pro | c.712A>C | 0 | classic PKU |
| p.(Gly239Asp) | c.716G>A | 0 | classic PKU |

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|-----------------------|---------------------|---|-------------|
| p.(Arg241ProfsTer100) | c.722delG | 0 | classic PKU |
| p.(Leu242Phe) | c.724C>T | 0 | classic PKU |
| p.(Arg243Ter) | c.727C>T | 0 | classic PKU |
| p.Arg243Gln | c.728G>A | 0 | classic PKU |
| p.(Arg243Leu) | c.728G>T | 0 | classic PKU |
| p.(Pro244Ser) | c.730C>T | 0 | classic PKU |
| p.Val245Glu | c.734T>A | 0 | classic PKU |
| p.(Ala246ValfsTer95) | c.737delC | 0 | classic PKU |
| p.(Gly247Asp) | c.740G>A | 0 | classic PKU |
| p.Gly247Val | c.740G>T | 0 | classic PKU |
| p.(Gly247AlafsTer94) | c.740delG | 0 | classic PKU |
| p.(Leu248ArgfsTer93) | c.743del | 0 | classic PKU |
| p.(Leu249PhefsTer92) | c.745delC | 0 | classic PKU |
| p.(Leu249Pro) | c.746T>C | 0 | classic PKU |
| p.(Arg252GlyfsTer30) | c.753_754delTC | 0 | classic PKU |
| p.(Arg252GlyfsTer89) | c.753delT | 0 | classic PKU |
| p.Arg252Gly | c.754C>G | 0 | classic PKU |
| p.Arg252Trp | c.754C>T | 0 | classic PKU |
| p.Arg252Gln | c.755G>A | 0 | classic PKU |
| p.Leu255Ser | c.764T>C | 0 | classic PKU |
| p.(Gly257Val) | c.770G>T | 0 | classic PKU |
| p.(Gly257Asp) | c.770G>A | 0 | classic PKU |
| p.Ala259Thr | c.775G>A | 0 | classic PKU |
| p.Ala259Val | c.776C>T | 0 | classic PKU |
| p.(Arg261Ter) | c.781C>T | 0 | classic PKU |
| p.(Arg261Gly) | c.781C>G | 0 | classic PKU |
| p.(Phe263Leu) | c.789C>G | 0 | classic PKU |
| p.(Cys265Tyr) | c.794G>A | 0 | classic PKU |
| p.(Cys265Ter) | c.795C>A | 0 | classic PKU |
| p.(Thr266Glu) | c.796_797delACinsGA | 0 | classic PKU |
| p.(Gln267Ter) | c.799C>T | 0 | classic PKU |
| p.(Gln267Arg) | c.800A>G | 0 | classic PKU |
| p.(Tyr268Ter) | c.804C>A | 0 | classic PKU |
| p.(Ile269ThrfsTer72) | c.806delT | 0 | classic PKU |
| p.(Arg270Lys) | c.809G>A | 0 | classic PKU |

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|----------------------------|------------------------|---|-------------|
| p.(His271IlefsTer10) | c.810_814delACATG | 0 | classic PKU |
| p.(Arg270Ser) | c.810A>T | 0 | classic PKU |
| p.(Gly272Ter) | c.814G>T | 0 | classic PKU |
| p.(Lys274AsnfsTer5) | c.822_832del11 | 0 | classic PKU |
| p.(Met276Arg) | c.827T>G | 0 | classic PKU |
| p.(Tyr277Cys) | c.830A>G | 0 | classic PKU |
| p.Thr278Ile | c.833C>T | 0 | classic PKU |
| p.(Thr278Asn) | c.833C>A | 0 | classic PKU |
| p.(Glu280AsnfsTer61) | c.833delC | 0 | classic PKU |
| p.(Glu280AsnfsTer61) | c.837delC | 0 | classic PKU |
| p.(Thr263MetfsTer60) | c.838_842+3delGAACCGTG | 0 | classic PKU |
| p.Glu280Lys | c.838G>A | 0 | classic PKU |
| p.(Glu280Ter) | c.838del8bp | 0 | classic PKU |
| p.(Glu280AspfsTer3) | c.839_840insT | 0 | classic PKU |
| p.(Glu280Gly) | c.839A>G | 0 | classic PKU |
| p.Glu280Ala | c.839A>C | 0 | classic PKU |
| p.(Pro281Ser) | c.841C>T | 0 | classic PKU |
| p.(Pro281Ala) | c.841C>G | 0 | classic PKU |
| p.Pro281fs | c.841_842+1delCCG | 0 | classic PKU |
| p.Pro281Leu | c.842C>T | 0 | classic PKU |
| p.? / IVS7+1G>A | c.842+1G>A | 0 | classic PKU |
| p.? / IVS7+2T>A | c.842+2T>A | 0 | classic PKU |
| p.? / IVS7+3G>C | c.842+3G>C | 0 | classic PKU |
| p.? / IVS7+4A>G | c.842+4A>G | 0 | classic PKU |
| p.? / IVS7+6T>A | c.842+6T>A | 0 | classic PKU |
| p.? / IVS7-5T>C | c.843-5T>C | 0 | classic PKU |
| p.? / IVS7-4delT | c.843-4delT | 0 | classic PKU |
| p.? / IVS7-2A>T | c.843-2A>T | 0 | classic PKU |
| p.? / IVS7-14_11delCTTT | c.843-14_11delCTTT | 0 | classic PKU |
| p.? / IVS7del-13 10delTTCT | c.843-13_843-10delTTCT | 0 | classic PKU |
| p.Asp282Asn | c.844G>A | 0 | classic PKU |
| p.Ile283Phe | c.847A>T | 0 | classic PKU |
| p.(Cys284Ter) | c.852C>A | 0 | classic PKU |
| p.(Glu286Lys) | c.856G>A | 0 | classic PKU |
| p.(His290Leu) | c.869A>T | 0 | classic PKU |

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|----------------------|-----------------|---|-------------|
| p.(Ser295Ter) | c.884C>G | 0 | classic PKU |
| p.(Asp296Gly) | c.887A>G | 0 | classic PKU |
| p.(Phe299del) | c.895_897delTTT | 0 | classic PKU |
| p.Phe299Cys | c.896T>G | 0 | classic PKU |
| p.(Gln301Ter) | c.901C>T | 0 | classic PKU |
| p.(Gln301Pro) | c.902A>C | 0 | classic PKU |
| p.(Phe302fsTer39) | c.904delT | 0 | classic PKU |
| p.? / Ex9_11del | g.~6.7kdel | 0 | classic PKU |
| p.(Ser303ProfsTer38) | c.907delT | 0 | classic PKU |
| p.(Gln304Ter) | c.910C>T | 0 | classic PKU |
| p.Gln304Pro | c.911A>C | 0 | classic PKU |
| p.? / IVS8+1G>A | c.912+1G>A | 0 | classic PKU |
| p.? / IVS8+1G>T | c.912+1G>T | 0 | classic PKU |
| p.? / IVS8+2T>C | c.912+2T>C | 0 | classic PKU |
| p.? / IVS8+3A>C | c.912+3A>C | 0 | classic PKU |
| p.? / IVS8-7A>G | c.913-7A>G | 0 | classic PKU |
| p.? / IVS8-5T>G | c.913-5T>G | 0 | classic PKU |
| p.? / IVS8-2A>G | c.913-2A>G | 0 | classic PKU |
| p.? / IVS8-8A>G | c.913-8A>G | 0 | classic PKU |
| p.(Glu305_Thr323dup) | c.913_969dup57 | 0 | classic PKU |
| p.(Ile306LeufsTer35) | c.916delA | 0 | classic PKU |
| p.(Gly307AlafsTer34) | c.920delG | 0 | classic PKU |
| p.(Ser310_Leu311del) | c.927_932del | 0 | classic PKU |
| p.(Leu311Ter) | c.929_939del11 | 0 | classic PKU |
| p.(Leu311Ter) | c.930_940del11 | 0 | classic PKU |
| p.(Leu311GlyfsTer4) | c.931_932delCT | 0 | classic PKU |
| p.Leu311Pro | c.932T>C | 0 | classic PKU |
| p.(Leu311Arg) | c.932T>G | 0 | classic PKU |
| p.(Gly312ValfsTer29) | c.935delG | 0 | classic PKU |
| p.(Gly312Val) | c.935G>T | 0 | classic PKU |
| p.(Pro314LeufsTer27) | c.941delC | 0 | classic PKU |
| p.(Thr323del) | c.967_969delACA | 0 | classic PKU |
| p.? / IVS9+1G>A | c.969+1G>A | 0 | classic PKU |
| p.? / IVS9+2insT | c.969+2insT | 0 | classic PKU |
| p.? / IVS9+5G>A | c.969+5G>A | 0 | classic PKU |

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|------------------------|--------------------|---|-------------|
| p.? / IVS9+6T>A | c.969+6T>A | 0 | classic PKU |
| p.? / IVS9-7A>G | c.970-7A>G | 0 | classic PKU |
| p.? / IVS9-6T>G | c.970-6T>G | 0 | classic PKU |
| p.? / IVS9-5T>A | c.970-5T>A | 0 | classic PKU |
| p.? / IVS9-2A>G | c.970-2A>G | 0 | classic PKU |
| p.? / IVS9-2A>C | c.970-2A>C | 0 | classic PKU |
| p.? / IVS9-1G>T | c.970-1G>T | 0 | classic PKU |
| p.? / IVS9-1G>A | c.970-1G>A | 0 | classic PKU |
| p.? / IVS9-1G>T | c.970-1G>T | 0 | classic PKU |
| p.(Ile324Asn) | c.971T>A | 0 | classic PKU |
| p.? / Ex10_11_12_13del | c.970-?_1359+? | 0 | classic PKU |
| p.(Tyr325Ter) | c.975C>G | 0 | classic PKU |
| p.(Trp326GlyfsTer15) | c.976delT | 0 | classic PKU |
| p.(Trp326Ter) | c.977G>A | 0 | classic PKU |
| p.(Gly332Val) | c.995G>T | 0 | classic PKU |
| p.(Cys334Ter) | c.1002C>A | 0 | classic PKU |
| p.(Gln336Ter) | c.1006C>T | 0 | classic PKU |
| p.(Lys341Ter) | c.1021A>T | 0 | classic PKU |
| p.Ala342Hisfs*Ter59 | c.1023delG | 0 | classic PKU |
| p.(Ala342Pro) | c.1024G>C | 0 | classic PKU |
| p.(Ala342HisfsTer58) | c.1024delG | 0 | classic PKU |
| p.(Tyr343Ter) | c.1029T>A | 0 | classic PKU |
| p.(Leu347SerfsTer53) | c.1038delG | 0 | classic PKU |
| p.(Leu348ArgfsTer2) | c.1043_1053del11 | 0 | classic PKU |
| p.(Ser350ValfsTer5) | c.1044_1047dupGTCA | 0 | classic PKU |
| p.Ser349Pro | c.1045T>C | 0 | classic PKU |
| p.(Ser349Ter) | c.1046C>A | 0 | classic PKU |
| p.(Ser349Leu) | c.1046C>T | 0 | classic PKU |
| p.(Ser350Thr) | c.1048T>A | 0 | classic PKU |
| p.(Gly352ValfsTer48) | c.1055delG | 0 | classic PKU |
| p.(Glu353AsnfsTer47) | c.1056delT | 0 | classic PKU |
| p.(Glu353AsnfsTer47) | c.1057delG | 0 | classic PKU |
| p.(Glu353Ter) | c.1057G>T | 0 | classic PKU |
| p.(Leu354PhefsTer40) | c.1061dup | 0 | classic PKU |
| p.(Gln355Ter) | c.1063C>T | 0 | classic PKU |

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|---|--------------------|---|-------------|
| p.? / IVS10+1G>A | c.1065+1G>A | 0 | classic PKU |
| p.? / IVS10+1G>T | c.1065+1G>T | 0 | classic PKU |
| p.? / IVS10+3A>G | c.1065+3A>G | 0 | classic PKU |
| p.? / IVS10-14C>G | c.1066-14C>G | 0 | classic PKU |
| p.Gln355_Tyr356insGlyLeuGln / IVS10-11G>A | c.1066-11G>A | 0 | classic PKU |
| p.? / IVS10-10G>A | c.1066-10G>A | 0 | classic PKU |
| p.? / IVS10-3C>G | c.1066-3C>G | 0 | classic PKU |
| p.? / IVS10-1G>A | c.1066-1G>A | 0 | classic PKU |
| p.(Tyr356Ter) | c.1068C>A | 0 | classic PKU |
| p.(Tyr356Ter) | c.1068C>G | 0 | classic PKU |
| p.(Cys357Ter) | c.1071C>A | 0 | classic PKU |
| p.(Ser359Ter) | c.1076C>G | 0 | classic PKU |
| p.(Glu360Ter) | c.1078G>T | 0 | classic PKU |
| p.(Pro362Thr) | c.1084C>A | 0 | classic PKU |
| p.(Lys363AlafsTer30) | c.1087_1088delAA | 0 | classic PKU |
| p.(Lys363AsnfsTer37) | c.1089delG | 0 | classic PKU |
| p.(Leu365_Leu369del) | c.1092_1106del15 | 0 | classic PKU |
| p.(Leu365del) | c.1092_1094delTCT | 0 | classic PKU |
| p.(Leu367WfsTer33) | c.1099delC | 0 | classic PKU |
| p.(Leu367ProfsTer27) | c.1099dupC | 0 | classic PKU |
| p.(Glu370AlafsTer25) | c.1106_1107insAGCT | 0 | classic PKU |
| p.(Lys371Arg) | c.1112A>G | 0 | classic PKU |
| p.(Ala373HisfsTer20) | c.1117_1118delGC | 0 | classic PKU |
| p.(Ile374TyrfsTer20) | c.1119_1120insT | 0 | classic PKU |
| p.(Asn376IlefsTer24) | c.1127delA | 0 | classic PKU |
| p.(Tyr377ThrfsTer23) | c.1129delT | 0 | classic PKU |
| p.(Thr380GlyfsTer13) | c.1138_1139del | 0 | classic PKU |
| p.(Gln383Ter) | c.1147C>T | 0 | classic PKU |
| p.(Tyr386Cys) | c.1157A>G | 0 | classic PKU |
| p.(Tyr386PhefsTer14) | c.1157delA | 0 | classic PKU |
| p.(Tyr387His) | c.1159T>C | 0 | classic PKU |
| p.(Tyr387Ter) | c.1161C>A | 0 | classic PKU |
| p.(Val388GlyfsTer5) | c.1162_1163delGT | 0 | classic PKU |
| p.(Val388GlyfsTer5) | c.1163_1164delTG | 0 | classic PKU |
| p.(Ala389GlufsTer11) | c.1166delC | 0 | classic PKU |

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|----------------------|---------------------|---|-------------|
| p.(Glu390AspfsTer4) | c.1169_1170insC | 0 | classic PKU |
| p.(Ser391PhefsTer2) | c.1171_1172delAG | 0 | classic PKU |
| p.(Asn393IlefsTer2) | c.1177_1178insT | 0 | classic PKU |
| p.(Val399Ala) | c.1196T>C | 0 | classic PKU |
| p.(Val399GlyfsTer52) | c.1196_1199delTAAG | 0 | classic PKU |
| p.(Arg400GlyfsTer52) | c.1198delA | 0 | classic PKU |
| p.? / IVS11+1G>C | c.1199+1G>C | 0 | classic PKU |
| p.? / IVS11+1G>A | c.1199+1G>A | 0 | classic PKU |
| p.? / IVS11+2T>C | c.1199+2T>C | 0 | classic PKU |
| p.? / IVS11+5G>A | c.1199+5G>A | 0 | classic PKU |
| p.? / IVS11+5G>T | c.1199+5G>T | 0 | classic PKU |
| p.? / IVS11+4A>G | c.1199+4A>G | 0 | classic PKU |
| p.? / IVS11-8G>A | c.1200-8G>A | 0 | classic PKU |
| p.? / IVS11-2A>G | c.1200-2A>G | 0 | classic PKU |
| p.? / IVS11-1delG | c.1200-1delG | 0 | classic PKU |
| p.? / IVS11-1G>A | c.1200-1G>A | 0 | classic PKU |
| p.(Asn401ThrfsTer51) | c.1200delG | 0 | classic PKU |
| p.? / Ex12_13del | c.1200-?_1359+?del | 0 | classic PKU |
| p.(Asn401_Ser439del) | c.1200-?_1315+?del | 0 | classic PKU |
| p.? / IVS12-2A>C | c.1200-2A>C | 0 | classic PKU |
| p.(Ile406SerfsTer17) | c.1215_1219delAATAC | 0 | classic PKU |
| p.(Ile406SerfsTer15) | c.1216_1220del | 0 | classic PKU |
| p.(Pro407LeufsTer45) | c.1220delC | 0 | classic PKU |
| p.Arg408Trp | c.1222C>T | 0 | classic PKU |
| p.(Arg408GlyfsTer44) | c.1222delC | 0 | classic PKU |
| p.(Ser411Ter) | c.1232C>G | 0 | classic PKU |
| p.(Ser411Ter) | c.1232C>A | 0 | classic PKU |
| p.Arg413Pro | c.1238G>C | 0 | classic PKU |
| p.(Tyr414Ter) | c.1242C>A | 0 | classic PKU |
| p.(Pro416HisfsTer36) | c.1245del | 0 | classic PKU |
| p.(Pro416HisfsTer36) | c.1247del | 0 | classic PKU |
| p.(Leu424WfsTer28) | c.1269delC | 0 | classic PKU |
| p.(Leu424Ter) | c.1271T>A | 0 | classic PKU |
| p.(Gln428SerfsTer24) | c.1282delC | 0 | classic PKU |
| p.(Leu433PhefsTer3) | c.1298dup | 0 | classic PKU |

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|----------------------|-------------------------|-----|-------------|
| p.(Ser436ProfsTer16) | c.1306delT | 0 | classic PKU |
| p.(Asn438fs) | c.1314_1315+4del6 | 0 | classic PKU |
| p.? / Ex12del | c.1314_1315+4delCAGTAA | 0 | classic PKU |
| p.? / IVS12+1G>A | c.1315+1G>A | 0 | classic PKU |
| p.? / IVS12+2T>C | c.1315+2T>C | 0 | classic PKU |
| p.? / IVS12+4A>G | c.1315+4A>G | 0 | classic PKU |
| p.? / IVS12+5G<A | c.1315+5G>A | 0 | classic PKU |
| p.? / IVS12-5T>C | c.1316-5T>C | 0 | classic PKU |
| p.? / IVS13-1G>A | c.1316-1G>A | 0 | classic PKU |
| p.(Glu440Ter) | c.1318G>T | 0 | classic PKU |
| p.(Gly442TrpfsTer47) | c.1323_1324insT | 0 | classic PKU |
| p.(Leu448ArgfsTer3) | c.1342_1345delCTCC | 0 | classic PKU |
| p.(*453ValexTer35) | c.1355dupA | 0 | classic PKU |
| p.(*453ProextTer33) | c.1357_1361delTAAAG | 0 | classic PKU |
| p.? | c.1357_*2delTAAAG | 0 | classic PKU |
| p.(Gly148TrpfsTer29) | c.442-102_509+781del951 | 0.1 | classic PKU |
| p.(Ser350Tyr) | c.1049C>A | 0.4 | classic PKU |
| p.(Phe39del) | c.116_118delTCT | 0.7 | classic PKU |
| p.Tyr277Asp | c.829T>G | 0.8 | classic PKU |
| p.(Pro281Arg) | c.842C>G | 0.8 | classic PKU |
| p.Ala395Pro | c.1183G>C | 0.8 | classic PKU |
| p.Phe39Leu | c.117C>G | 1 | classic PKU |
| p.(Tyr325Cys) | c.974A>G | 1 | classic PKU |
| p.? / IVS10-3C>T | c.1066-3C>T | 1 | classic PKU |
| p.(Leu213Pro) | c.638T>C | 1.1 | classic PKU |
| p.(Phe39del) | c.115_117delTTC | 1.2 | classic PKU |
| p.(Leu194Pro) | c.581T>C | 1.2 | classic PKU |
| p.(Gly239Ser) | c.715G>A | 1.3 | classic PKU |
| p.Val399Val | c.1197A>T | 1.3 | classic PKU |
| p.Ile65Thr | c.194T>C | 1.4 | classic PKU |
| p.(Arg400Lys) | c.1199G>A | 1.4 | classic PKU |
| p.Leu348Val | c.1042C>G | 1.6 | classic PKU |
| p.(Pro211Leu) | c.632C>T | 1.7 | classic PKU |
| p.Arg261Gln | c.782G>A | 1.7 | classic PKU |
| p.Gly46Ser | c.136G>A | 1.8 | classic PKU |

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|-----------------|-----------------|-----|------------------|
| p.? / IVS7+5G>A | c.842+5G>A | 1.9 | classic PKU |
| p.(Ser70del) | c.206_208delCTT | 2 | classic PKU |
| p.(Tyr206Cys) | c.617A>G | 2 | classic PKU |
| p.Gly218Val | c.653G>T | 2 | classic PKU |
| p.Val388Met | c.1162G>A | 2 | classic PKU |
| p.(Ile406Thr) | c.1217T>C | 2 | classic PKU |
| p.Leu48Ser | c.143T>C | 2.1 | classic-mild PKU |
| p.(Ser67Pro) | c.199T>C | 2.1 | classic-mild PKU |
| p.(Ile95del) | c.284_286delTCA | 2.2 | classic-mild PKU |
| p.(Ala345Thr) | c.1033G>A | 2.2 | classic-mild PKU |
| p.(Ser349Ala) | c.1045T>G | 2.3 | classic-mild PKU |
| p.(Gln20His) | c.60G>C | 2.5 | classic-mild PKU |
| p.Ala342Thr | c.1024G>A | 2.5 | classic-mild PKU |
| p.Pro416Gln | c.1247C>A | 2.5 | classic-mild PKU |
| p.Ala104Asp | c.311C>A | 2.7 | classic-mild PKU |
| p.(Arg261Pro) | c.782G>C | 2.8 | classic-mild PKU |
| p.(Ala434Asp) | c.1301C>A | 3 | classic-mild PKU |
| p.(Gly247Arg) | c.739G>C | 3.1 | classic-mild PKU |
| p.(Ala309Asp) | c.926C>A | 3.1 | classic-mild PKU |
| p.Ala309Val | c.926C>T | 3.1 | classic-mild PKU |
| p.(Arg400Thr) | c.1199G>C | 3.1 | classic-mild PKU |
| p.(His146Tyr) | c.436C>T | 3.3 | mild PKU |
| p.(Pro147Leu) | c.440C>T | 3.3 | mild PKU |
| p.Phe161Ser | c.482T>C | 3.3 | mild PKU |
| p.(Gly307Asp) | c.920G>A | 3.3 | mild PKU |
| p.(Ser310Phe) | c.929C>T | 3.3 | mild PKU |
| p.(Ser391Ile) | c.1172G>T | 3.3 | mild PKU |
| p.(Leu249Phe) | c.745C>T | 3.6 | mild PKU |
| p.(Ile174Asn) | c.521T>A | 3.8 | mild PKU |
| p.(Gly188Asp) | c.563G>A | 3.8 | mild PKU |
| p.(Gln304Gln) | c.912G>A | 3.8 | mild PKU |
| p.(Tyr343Cys) | c.1028A>G | 4 | mild PKU |
| p.? / IVS4+5G>A | c.441+5G>A | 4.2 | mild PKU |
| p.(Lys320Asn) | c.960G>C | 4.4 | mild PKU |
| p.(Thr63Pro) | c.187A>C | 5 | mild PKU |

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|------------------|-------------|-----|-------------------|
| p.Arg68Gly | c.202A>G | 5 | mild PKU |
| p.(Asp84Tyr) | c.250G>T | 5 | mild PKU |
| p.(Ile95Phe) | c.283A>T | 5 | mild PKU |
| p.(Asp129Gly) | c.386A>G | 5 | mild PKU |
| p.Asp143Gly | c.428A>G | 5.0 | mild PKU |
| p.(Thr238Ala) | c.712A>G | 5 | mild PKU |
| p.(Pro275Ser) | c.823C>T | 5 | mild PKU |
| p.(Pro275Arg) | c.824C>G | 5.0 | mild PKU |
| p.(Met276Val) | c.826A>G | 5 | mild PKU |
| p.Leu308Phe | c.922C>T | 5 | mild PKU |
| p.Leu333Phe | c.997C>T | 5.0 | mild PKU |
| p.(Ala345Ser) | c.1033G>T | 5 | mild PKU |
| p.(Gly352Cys) | c.1054G>T | 5 | mild PKU |
| p.(Cys357Tyr) | c.1070G>A | 5 | mild PKU |
| p.(Leu358Phe) | c.1074A>T | 5 | mild PKU |
| p.(Ala395Gly) | c.1184C>G | 5 | mild PKU |
| p.(Thr418Pro) | c.1252A>C | 5 | mild PKU |
| p.(Leu430Pro) | c.1289T>C | 5 | mild PKU |
| p.Tyr414Cys | c.1241A>G | 5.1 | mild PKU |
| p.Arg408Gln | c.1223G>A | 5.2 | mild PKU |
| p.Arg241His | c.722G>A | 5.3 | mild PKU |
| p.Arg68Ser | c.204A>T | 5.4 | mild PKU |
| p.(Asp338Tyr) | c.1012G>T | 5.4 | mild PKU |
| p.(Phe331Ser) | c.992T>C | 5.5 | mild PKU |
| p.Pro407Ser | c.1219C>T | 5.6 | mild PKU |
| p.? / IVS12+6T>A | c.1315+6T>A | 5.6 | mild PKU |
| p.(Asn167Ile) | c.500A>T | 5.7 | mild PKU |
| p.(Asp222Gly) | c.665A>G | 5.7 | mild PKU |
| p.Arg241Cys | c.721C>T | 6 | mild PKU |
| p.(Met276Lys) | c.827T>A | 6 | mild PKU |
| p.? / IVS4-5C>G | c.442-5C>G | 6.2 | mild PKU |
| p.(Pro119Ser) | c.355C>T | 6.7 | mild PKU-mild HPA |
| p.(Tyr168His) | c.502T>C | 6.7 | mild PKU-mild HPA |
| p.(Lys396Arg) | c.1187A>G | 6.7 | mild PKU-mild HPA |
| p.Arg413Ser | c.1237C>A | 6.7 | mild PKU-mild HPA |

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|-------------------|--------------|-----|-------------------|
| p.Glu390Gly | c.1169A>G | 6.8 | mild PKU-mild HPA |
| p.Glu76Gly | c.227A>G | 7.1 | mild PKU-mild HPA |
| p.Val190Ala | c.569T>C | 7.1 | mild PKU-mild HPA |
| p.Glu178Gly | c.533A>G | 7.4 | mild PKU-mild HPA |
| p.(Val177Leu) | c.529G>C | 7.5 | mild PKU-mild HPA |
| p.(Pro314Thr) | c.940C>A | 8 | mild HPA |
| p.(Phe55Leu) | c.165T>G | 8.3 | mild HPA |
| p.Thr92Ile | c.275C>T | 8.3 | mild HPA |
| p.(Val388Leu) | c.1162G>C | 8.3 | mild HPA |
| p.? / IVS11+17G>A | c.1199+17G>A | 8.3 | mild HPA |
| p.(Ile421Thr) | c.1262T>C | 8.3 | mild HPA |
| p.(Thr372Ser) | c.1114A>T | 8.5 | mild HPA |
| p.Arg53His | c.158G>A | 8.8 | mild HPA |
| p.(Ile65Val) | c.193A>G | 8.8 | mild HPA |
| p.(Ile174Val) | c.520A>G | 8.8 | mild HPA |
| p.(Asn61Lys) | c.183C>A | 9 | mild HPA |
| p.(Arg169Ser) | c.505C>A | 9 | mild HPA |
| p.(Arg176Gln) | c.527G>A | 9 | mild HPA |
| p.(Thr186Ile) | c.557C>T | 9 | mild HPA |
| p.(Pro366His) | c.1097C>A | 9 | mild HPA |
| p.(Ile406Met) | c.1218A>G | 9 | mild HPA |
| p.(Arg413His) | c.1238G>A | 9 | mild HPA |
| p.Ala300Ser | c.898G>T | 9.2 | mild HPA |
| p.(Ala322Thr) | c.964G>A | 9.2 | mild HPA |
| p.Arg155His | c.464G>A | 9.3 | mild HPA |
| p.(Ser303Ala) | c.907T>G | 9.3 | mild HPA |
| p.Ala403Val | c.1208C>T | 9.3 | mild HPA |
| p.His170Asp | c.508C>G | 9.4 | mild HPA |
| p.Ser87Arg | c.261C>A | 9.6 | mild HPA |
| p.Arg176Leu | c.527G>T | 9.7 | mild HPA |
| p.Pro211Thr | c.631C>A | 9.7 | mild HPA |
| p.Ile306Val | c.916A>G | 9.7 | mild HPA |
| p.Val230Ile | c.688G>A | 9.8 | mild HPA |
| p.(Arg297His) | c.890G>A | 9.8 | mild HPA |
| p.Val245Ala | c.734T>C | 9.9 | mild HPA |

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|---------------|---------------------|------|----------|
| p.(Val245Ala) | c.734_735delTGinsCA | 9.9 | mild HPA |
| p.(Thr380Met) | c.1139C>T | 9.9 | mild HPA |
| p.Ala47Val | c.140C>T | 10 | mild HPA |
| p.(Glu66Lys) | c.196G>A | 10 | mild HPA |
| p.(Arg71His) | c.212G>A | 10 | mild HPA |
| p.(Ser87Arg) | c.259A>C | 10.0 | mild HPA |
| p.(His107Arg) | c.320A>G | 10 | mild HPA |
| p.(Asp145Val) | c.434A>T | 10 | mild HPA |
| p.(Arg155Cys) | c.463C>T | 10.0 | mild HPA |
| p.(Arg169His) | c.506G>A | 10 | mild HPA |
| p.(Val177Met) | c.529G>A | 10 | mild HPA |
| p.(Thr193Ile) | c.578C>T | 10 | mild HPA |
| p.(His201Tyr) | c.601C>T | 10 | mild HPA |
| p.(Leu258Pro) | c.773T>C | 10.0 | mild HPA |
| p.(Ile269Leu) | c.805A>C | 10 | mild HPA |
| p.(Met276Thr) | c.827T>C | 10 | mild HPA |
| p.(Gly289Arg) | c.865G>C | 10.0 | mild HPA |
| p.(Arg297Cys) | c.889C>T | 10 | mild HPA |
| p.(Ala313Val) | c.938C>T | 10 | mild HPA |
| p.Pro314His | c.941C>A | 10 | mild HPA |
| p.Ala322Gly | c.965C>G | 10 | mild HPA |
| p.(Phe392Ile) | c.1174T>A | 10 | mild HPA |
| p.(Asp394His) | c.1180G>C | 10 | mild HPA |
| p.Asp415Asn | c.1243G>A | 10 | mild HPA |
| p.Gln419Arg | c.1256A>G | 10 | mild HPA |

For interpretation of APV see: Garbade, S. F., N. Shen, N. Himmelreich, D. Haas, F. K. Trefz, G. F. Hoffmann, P. Burgard and N. Blau (2019). "Allelic phenotype values: a model for genotype-based phenotype prediction in phenylketonuria." *Genet Med* 21(3): 580-590.

APV = 10 Mildest HPA

APV = 0 Most severe classic PKU