

Cystic fibrosis targeted expanded panel (EXP) v3.0

Division of Genome Diagnostics

at BC Children's and BC Women's Hospitals

This expanded panel includes all detectable CF-causing or varying clinical consequence CFTR variants classified by CFTR2 (January 10, 2020 release; www.cftr2.org) or by the Division of Genome Diagnostics.

- Classification is as per CFTR2 unless otherwise denoted by GD.
- cDNA and Protein are described using HGVS nomenclature version 20.05.
- Change relative to EXPv2.1:
 - o Fifteen (15) additional variants, denoted by #
 - o One (1) variant removed due to downgrade by CFTR2
 - from CF-causing to Unknown significance (c.165-3 C>T)

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|-------------|-------------------------|-------------------|------------------------------|
| 124del23bp | c.-9_14del ¹ | p.? | CF-causing |
| M1V | c.1A>G | p.? ² | CF-causing |
| Q2X | c.4C>T | p.Gln2Ter | CF-causing |
| S4X | c.11C>A | p.Ser4Ter | CF-causing |
| P5L | c.14C>T | p.Pro5Leu | Varying clinical consequence |
| S13F | c.38C>T | p.Ser13Phe | CF-causing |
| L15P | c.44T>C | p.Leu15Pro | CF-causing |
| 182delT | c.50delT | p.Phe17SerfsTer8 | CF-causing |
| 185+1G>T | c.53+1G>T | p.? | CF-causing |
| W19X | c.57G>A | p.Trp19Ter | CF-causing |
| G27R | c.79G>A | p.Gly27Arg | CF-causing |
| G27X | c.79G>T | p.Gly27Ter | CF-causing |
| Q30X | c.88C>T | p.Gln30Ter | CF-causing |
| Q39X | c.115C>T | p.Gln39Ter | CF-causing |
| A46D | c.137C>A | p.Ala46Asp | CF-causing |
| 296+1G>A | c.164+1G>A | p.? | CF-causing |
| 296+1G>T | c.164+1G>T | p.? | CF-causing |
| 296+2T>C | c.164+2T>C | p.? | CF-causing |
| 296+3insT | c.164+4dupT | p.? | CF-causing |
| 297-1G>A | c.165-1G>A | p.? | CF-causing |
| E56K | c.166G>A | p.Glu56Lys | CF-causing |
| W57G | c.169T>G | p.Trp57Gly | CF-causing |
| W57X | c.170G>A | p.Trp57Ter | CF-causing |
| W57X | c.171G>A | p.Trp57Ter | CF-causing |
| 306insA | c.175dupA | p.Arg59LysfsTer10 | CF-causing |

¹ Full variant name is c.-9_14delCGAGAGACCATGCAGAGGTCGCC

² Alternative historical name for this variant is p.Met1Val

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|-------------|---------------------------|--------------------|------------------------------|
| 306delTAGA | c.174_177delTAGA | p.Asp58GlufsTer32 | CF-causing |
| E60K | c.178G>A | p.Glu60Lys | CF-causing |
| E60X | c.178G>T | p.Glu60Ter | CF-causing |
| P67L | c.200C>T | p.Pro67Leu | CF-causing |
| R74W | c.220C>T | p.Arg74Trp | Varying clinical consequence |
| R75X | c.223C>T | p.Arg75Ter | CF-causing |
| 365-366insT | c.233dupT | p.Trp79LeufsTer32 | CF-causing |
| G85E | c.254G>A | p.Gly85Glu | CF-causing |
| 394delTT | c.262_263delTT | p.Leu88IlefsTer22 | CF-causing |
| L88X | c.263T>A | p.Leu88Ter | CF-causing |
| L88X | c.263T>G | p.Leu88Ter | CF-causing |
| G91R | c.271G>A | p.Gly91Arg | CF-causing |
| 405+1G>A | c.273+1G>A | p.? | CF-causing |
| 405+3A>C | c.273+3A>C | p.? | CF-causing |
| 406-2A>G | c.274-2A>G | p.? | CF-causing |
| 406-1G>A | c.274-1G>A | p.? | CF-causing |
| E92K | c.274G>A | p.Glu92Lys | CF-causing |
| E92X | c.274G>T | p.Glu92Ter | CF-causing |
| Q98X | c.292C>T | p.Gln98Ter | CF-causing |
| Q98R | c.293A>G | p.Gln98Arg | CF-causing |
| P99L | c.296C>T | p.Pro99Leu | CF-causing |
| L102R | c.305T>G | p.Leu102Arg | CF-causing |
| 442delA | c.310delA | p.Arg104GluTer3 | CF-causing |
| 444delA | c.313delA | p.Ile105SerfsTer2 | CF-causing |
| 457TAT>G | c.325_327delinsG | p.Tyr109GlyfsTer4 | CF-causing |
| D110H | c.328G>C | p.Asp110His | CF-causing |
| D110E | c.330C>A | p.Asp110Glu | Varying clinical consequence |
| R117C | c.349C>T | p.Arg117Cys | CF-causing |
| R117G | c.349C>G | p.Arg117Gly | Varying clinical consequence |
| R117H | c.350G>A | p.Arg117His | Varying clinical consequence |
| R117P | c.350G>C [#] | p.Arg117Pro | CF-causing |
| R117L | c.350G>T | p.Arg117Leu | Varying clinical consequence |
| A120T | c.358G>A [#] | p.Ala120Thr | Varying clinical consequence |
| Y122X | c.366T>A | p.Tyr122Ter | CF-causing |
| G126D | c.377G>A | p.Gly126Asp | CF-causing |
| 541delC | c.409delC | p.Leu137SerfsTer16 | CF-causing |
| L138ins | c.413_415dupTAC | p.Leu138dup | CF-causing |
| H139R | c.416A>G | p.His139Arg | CF-causing |
| 574delA | c.442delA | p.Ile148LeufsTer5 | CF-causing |
| 602del14 | c.470_483del ³ | p.Phe157Ter | CF-causing |
| Y161D | c.481T>G | p.Tyr161Asp | CF-causing |
| 621+1G>T | c.489+1G>T | p.? | CF-causing |

³ Full variant name is c.470_483delTTAGTTTGATTTAT

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|-------------|-----------------------------|--------------------|------------------------------|
| 621+3A>G | c.489+3A>G | p.? | Varying clinical consequence |
| L165S | c.494T>C | p.Leu165Ser | CF-causing |
| 663delT | c.531delT | p.Ile177MetfsTer12 | CF-causing |
| G178R | c.532G>A | p.Gly178Arg | CF-causing |
| 675del4 | c.543_546delTAGT | p.Leu183PhefsTer5 | CF-causing |
| F191V | c.571T>G # | p.Phe191Val | CF-causing |
| E193X | c.577G>T | p.Glu193Ter | CF-causing |
| 711+1G>T | c.579+1G>T | p.? | CF-causing |
| 711+3A>G | c.579+3A>G | p.? | CF-causing |
| 711+5G>A | c.579+5G>A | p.? | CF-causing |
| 712-1G>T | c.580-1G>T | p.? | CF-causing |
| G194R | c.580G>A # | p.Gly194Arg | CF-causing |
| G194V | c.581G>T # | p.Gly194Val | Varying clinical consequence |
| H199Y | c.595C>T | p.His199Tyr | CF-causing |
| P205S | c.613C>T | p.Pro205Ser | CF-causing |
| L206W | c.617T>G | p.Leu206Trp | CF-causing |
| W216X | c.647G>A | p.Trp216Ter | CF-causing |
| L218X | c.653T>A | p.Leu218Ter | CF-causing ^{GD} |
| Q220X | c.658C>T | p.Gln220Ter | CF-causing |
| L227R | c.680T>G | p.Leu227Arg | CF-causing |
| V232D | c.695T>A | p.Val232Asp | CF-causing |
| Q237E | c.709C>G # | p.Gln237Glu | Varying clinical consequence |
| 849delG | c.717delG | p.Leu240Ter | CF-causing |
| 852del22 | c.723_743+1del ⁴ | p.? ⁵ | CF-causing |
| R258G | c.772A>G # | p.Arg258Gly | Varying clinical consequence |
| M265R | c.794T>G | p.Met265Arg | Varying clinical consequence |
| 935delA | c.803delA | p.Asn268IlefsTer17 | CF-causing |
| Y275X | c.825C>G | p.Tyr275Ter | CF-causing |
| C276X | c.828C>A | p.Cys276Ter | CF-causing |
| 977insA | c.850dupA | p.Met284AsnfsTer3 | CF-causing |
| 991del5 | c.861_865delCTTAA | p.Asn287LysfsTer19 | CF-causing |
| F311L | c.933C>G | p.Phe311Leu | CF-causing |
| G314E | c.941G>A # | p.Gly314Glu | Varying clinical consequence |
| 1078delT | c.948delT | p.Phe316LeufsTer12 | CF-causing |
| 1119delA | c.987delA | p.Gly330GlufsTer39 | CF-causing |
| G330X | c.988G>T | p.Gly330Ter | CF-causing |
| R334W | c.1000C>T | p.Arg334Trp | CF-causing |
| R334Q | c.1001G>A | p.Arg334Gln | Varying clinical consequence |
| R334L | c.1001G>T | p.Arg334Leu | CF-causing |
| 1138insG | c.1006_1007insG | p.Ile336SerfsTer28 | CF-causing |

⁴ Full variant name is c.723_743+1delGAGAATGATGATGAAGTACAGG

⁵ Alternative historical name for this variant is p.Gly241GlufsTer13

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|-------------|-----------------------|--|------------------------------|
| I336K | c.1007T>A | p.Ile336Lys | CF-causing |
| T338I | c.1013C>T | p.Thr338Ile | CF-causing |
| S341P | c.1021T>C | p.Ser341Pro | CF-causing |
| 1154insTC | c.1021_1022dupTC | p.Phe342HisfsTer28 | CF-causing |
| 1161delC | c.1029delC | p.Cys343Ter | CF-causing |
| L346P | c.1037T>C | p.Leu346Pro | CF-causing |
| R347H | c.1040G>A | p.Arg347His | CF-causing |
| R347P | c.1040G>C | p.Arg347Pro | CF-causing |
| R352W | c.1054C>T | p.Arg352Trp | Varying clinical consequence |
| R352Q | c.1055G>A | p.Arg352Gln | CF-causing |
| Q359K/T360K | c.[1075C>A;1079C>A] | p.Gln359_Thr360delinsLysLys ⁶ | CF-causing |
| 1213delT | c.1081delT | p.Trp361GlyfsTer8 | CF-causing |
| 1248+1G>A | c.1116+1G>A | p.? | CF-causing |
| 1249-1G>A | c.1117-1G>A | p.? | CF-causing |
| 1259insA | c.1130dupA | p.Gln378AlafsTer4 | CF-causing |
| 1288insTA | c.1155_1156dupTA | p.Asn386IlefsTer3 | CF-causing |
| W401X | c.1202G>A | p.Trp401Ter | CF-causing |
| W401X | c.1203G>A | p.Trp401Ter | CF-causing |
| 1341+1G>A | c.1209+1G>A | p.? | CF-causing |
| 1343delG | c.1211delG | p.Gly404AspfsTer38 | CF-causing |
| Q414X | c.1240C>T | p.Gln414Ter | CF-causing |
| 1429del7 | c.1301_1307delCACTTCT | p.Ser434LeufsTer6 | CF-causing |
| D443Y | c.1327G>T | p.Asp443Tyr | Varying clinical consequence |
| 1461ins4 | c.1327_1330dupGATA | p.Ile444ArgfsTer3 | CF-causing |
| 1471delA | c.1340delA | p.Lys447ArgfsTer2 | CF-causing |
| L453S | c.1358T>C | p.Leu453Ser | CF-causing |
| A455E | c.1364C>A | p.Ala455Glu | CF-causing |
| 1497delGG | c.1365_1366delGG | p.Val456CysfsTer25 | CF-causing |
| V456A | c.1367T>C | p.Val456Ala | CF-causing |
| 1504delG | c.1373delG | p.Gly458AspfsTer11 | CF-causing |
| 1525-1G>A | c.1393-1G>A | p.? | CF-causing |
| 1525-2A>G | c.1393-2A>G | p.? | CF-causing |
| S466X | c.1397C>A | p.Ser466Ter | CF-causing |
| S466X | c.1397C>G | p.Ser466Ter | CF-causing |
| L467P | c.1400T>C | p.Leu467Pro | CF-causing |
| 1548delG | c.1418delG | p.Gly473GlufsTer54 | CF-causing |
| E474K | c.1420G>A | p.Glu474Lys | CF-causing |
| S489X | c.1466C>A | p.Ser489Ter | CF-causing |
| S492F | c.1475C>T | p.Ser492Phe | CF-causing |
| 1609delCA | c.1477_1478delCA | p.Gln493ValfsTer10 | CF-causing |
| Q493X | c.1477C>T | p.Gln493Ter | CF-causing |

⁶ Alternative historical name for this variant is p.[Gln359Lys;Thr360Lys]

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|---------------|-------------------|-------------------|------------------------------|
| W496X | c.1487G>A | p.Trp496Ter | CF-causing |
| I502T | c.1505T>C | p.Ile502Thr | CF-causing |
| I507del | c.1519_1521delATC | p.Ile507del | CF-causing |
| F508del | c.1521_1523delCTT | p.Phe508del | CF-causing |
| D513G | c.1538A>G | p.Asp513Gly | CF-causing |
| 1677delTA | c.1545_1546delTA | p.Tyr515Ter | CF-causing |
| V520F | c.1558G>T | p.Val520Phe | CF-causing |
| C524X | c.1572C>A | p.Cys524Ter | CF-causing |
| Q525X | c.1573C>T | p.Gln525Ter | CF-causing |
| 1716+1G>A | c.1584+1G>A | p.? | CF-causing |
| 1717-1G>A | c.1585-1G>A | p.? | CF-causing |
| 1717-8G>A | c.1585-8G>A | p.? | CF-causing |
| G542X | c.1624G>T | p.Gly542Ter | CF-causing |
| S549R | c.1645A>C | p.Ser549Arg | CF-causing |
| S549N | c.1646G>A | p.Ser549Asn | CF-causing |
| S549R | c.1647T>A | p.Ser549Arg | CF-causing |
| S549R | c.1647T>G | p.Ser549Arg | CF-causing |
| G550X | c.1648G>T | p.Gly550Ter | CF-causing |
| 1782delA | c.1650delA | p.Gly551ValfsTer8 | CF-causing |
| G551S | c.1651G>A | p.Gly551Ser | CF-causing |
| G551D | c.1652G>A | p.Gly551Asp | CF-causing |
| Q552X | c.1654C>T | p.Gln552Ter | CF-causing |
| R553X | c.1657C>T | p.Arg553Ter | CF-causing |
| 1802delC | c.1670delC | p.Ser557PhefsTer2 | CF-causing |
| L558S | c.1673T>C | p.Leu558Ser | CF-causing |
| A559T | c.1675G>A | p.Ala559Thr | CF-causing |
| 1811+1.6kbA>G | c.1680-886A>G | p.? | CF-causing |
| 1811+1G>C | c.1679+1G>C | p.? | CF-causing |
| R560K | c.1679G>A | p.Arg560Lys | CF-causing |
| R560T | c.1679G>C | p.Arg560Thr | CF-causing |
| 1811+1G>A | c.1679+1G>A | p.? | CF-causing |
| 1811+1643G>T | c.1680-877G>T | p.? | CF-causing |
| 1812-1G>A | c.1680-1G>A | p.? | CF-causing |
| R560S | c.1680A>C | p.Arg560Ser | CF-causing |
| A561E | c.1682C>A | p.Ala561Glu | CF-causing |
| Y563N | c.1687T>A | p.Tyr563Asn | CF-causing |
| Y563D | c.1687T>G | p.Tyr563Asp | CF-causing |
| 1824delA | c.1692delA | p.Asp565MetfsTer7 | CF-causing |
| 1833delT | c.1703delT | p.Leu568CysfsTer4 | CF-causing |
| Y569D | c.1705T>G | p.Tyr569Asp | CF-causing |
| P574H | c.1721C>A | p.Pro574His | CF-causing |
| F575Y | c.1724T>A | p.Phe575Tyr | Varying clinical consequence |
| D579G | c.1736A>G | p.Asp579Gly | Varying clinical consequence |

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|----------------------------|------------------------|--------------------|------------------------------|
| E585X | c.1753G>T | p.Glu585Ter | CF-causing |
| E588V | c.1763A>T | p.Glu588Val | Varying clinical consequence |
| 1898+1G>A | c.1766+1G>A | p.? | CF-causing |
| 1898+1G>C | c.1766+1G>C | p.? | CF-causing |
| 1898+1G>T | c.1766+1G>T | p.? | CF-causing |
| 1898+3A>G | c.1766+3A>G | p.? | CF-causing |
| 1898+5G>T | c.1766+5G>T | p.? | CF-causing |
| 1924del7 | c.1792_1798delAAAATA | p.Lys598GlyfsTer11 | CF-causing |
| I601F | c.1801A>T [#] | p.Ile601Phe | CF-causing |
| H609R | c.1826A>G | p.His609Arg | CF-causing |
| A613T | c.1837G>A | p.Ala613Thr | CF-causing |
| D614G | c.1841A>G | p.Asp614Gly | Varying clinical consequence |
| I618T | c.1853T>C [#] | p.Ile618Thr | Varying clinical consequence |
| G622D | c.1865G>A | p.Gly622Asp | Varying clinical consequence |
| G628R | c.1882G>A | p.Gly628Arg | CF-causing |
| G628R | c.1882G>C | p.Gly628Arg | CF-causing |
| 2055del9>A | c.1923_1931delinsA | p.Ser641ArgfsTer5 | CF-causing |
| 2075delA | c.1943delA | p.Asp648ValfsTer15 | CF-causing |
| 2105- 2117del13insAGAAA | c.1973_1985delinsAGAAA | p.Arg658LysfsTer4 | CF-causing |
| 2118del4 | c.1986_1989delAACT | p.Thr663ArgfsTer8 | CF-causing |
| 2143delT | c.2012delT | p.Leu671Ter | CF-causing |
| G673X | c.2017G>T | p.Gly673Ter | CF-causing |
| 2183AA>G | c.2051_2052delinsG | p.Lys684SerfsTer38 | CF-causing |
| 2184insA | c.2052dupA | p.Gln685ThrfsTer4 | CF-causing |
| 2184delA | c.2052delA | p.Lys684AsnfsTer38 | CF-causing |
| 2185insC | c.2053dupC | p.Gln685ProfsTer4 | CF-causing |
| Q685X | c.2053C>T | p.Gln685Ter | CF-causing |
| R709X | c.2125C>T | p.Arg709Ter | CF-causing |
| K710X | c.2128A>T | p.Lys710Ter | CF-causing |
| Q715X | c.2143C>T | p.Gln715Ter | CF-causing |
| Q720X | c.2158C>T | p.Gln720Ter | CF-causing |
| 2307insA | c.2175dupA | p.Glu726ArgfsTer4 | CF-causing |
| L732X | c.2195T>G | p.Leu732Ter | CF-causing |
| 2347delG | c.2215delG | p.Val739TyrfsTer16 | CF-causing |
| P750L | c.2249C>T | p.Pro750Leu | Varying clinical consequence |
| R764X | c.2290C>T | p.Arg764Ter | CF-causing |
| R785X | c.2353C>T | p.Arg785Ter | CF-causing |
| R792X | c.2374C>T | p.Arg792Ter | CF-causing |
| 2556insAT | c.2423_2424dupAT | p.Ser809IlefsTer13 | CF-causing |
| 2585delT | c.2453delT | p.Leu818TrpfsTer3 | CF-causing |
| 2594delGT | c.2463_2464delTG | p.Ser821ArgfsTer4 | CF-causing |
| E822X | c.2464G>T | p.Glu822Ter | CF-causing |
| 2622+1G>A | c.2490+1G>A | p.? | CF-causing |

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|-------------|-----------------------------|----------------------|------------------------------|
| E831X | c.2491G>T | p.Glu831Ter | CF-causing |
| W846X | c.2537G>A | p.Trp846Ter | CF-causing |
| W846X | c.2538G>A | p.Trp846Ter | CF-causing |
| Y849X | c.2547C>A | p.Tyr849Ter | CF-causing |
| R851X | c.2551C>T | p.Arg851Ter | CF-causing |
| 2711delT | c.2583delT | p.Phe861LeufsTer3 | CF-causing |
| 2721del11 | c.2589_2599del ⁷ | p.Ile864SerfsTer28 | CF-causing |
| 2732insA | c.2601dupA | p.Val868SerfsTer28 | CF-causing |
| W882X | c.2645G>A | p.Trp882Ter | CF-causing |
| 2789+5G>A | c.2657+5G>A | p.? | CF-causing |
| 2790-1G>C | c.2658-1G>C | p.? | CF-causing |
| Q890X | c.2668C>T | p.Gln890Ter | CF-causing |
| S912X | c.2735C>A | p.Ser912Ter | CF-causing |
| 2869insG | c.2737_2738insG | p.Tyr913Ter | CF-causing |
| Y913X | c.2739T>A | p.Tyr913Ter | CF-causing |
| 2896insAG | c.2763_2764dupAG | p.Val922GlufsTer2 | CF-causing |
| L927P | c.2780T>C | p.Leu927Pro | CF-causing |
| 2942insT | c.2810dupT | p.Val938GlyfsTer37 | CF-causing |
| 2957delT | c.2825delT | p.Ile942ThrfsTer26 | CF-causing |
| S945L | c.2834C>T | p.Ser945Leu | CF-causing |
| 2991del32 | c.2859_2890del ⁸ | p.Leu953PhefsTer11 | CF-causing |
| 3007delG | c.2875delG | p.Ala959HisfsTer9 | CF-causing |
| 3028delA | c.2896delA | p.Thr966ArgfsTer2 | CF-causing |
| L967S | c.2900T>C | p.Leu967Ser | Varying clinical consequence |
| G970R | c.2908G>C | p.Gly970Arg | CF-causing |
| G970D | c.2909G>A | p.Gly970Asp | CF-causing |
| S977F | c.2930C>T | p.Ser977Phe | Varying clinical consequence |
| D979V | c.2936A>T | p.Asp979Val | CF-causing |
| 3120G>A | c.2988G>A | p.? | CF-causing |
| 3120+1G>A | c.2988+1G>A | p.? | CF-causing |
| 3121-1G>A | c.2989-1G>A | p.? | CF-causing |
| 3121-2A>G | c.2989-2A>G | p.? | CF-causing |
| 3132delTG | c.3002_3003delTG | p.Val1001AspfsTer45 | CF-causing |
| 3143del9 | c.3011_3019delCTATAGCAG | p.Ala1004_Ala1006del | CF-causing |
| A1006E | c.3017C>A | p.Ala1006Glu | CF-causing |
| 3171delC | c.3039delC | p.Tyr1014ThrfsTer9 | CF-causing |
| 3171insC | c.3039dupC | p.Tyr1014LeufsTer33 | CF-causing |
| F1016S | c.3047T>C | p.Phe1016Ser | Varying clinical consequence |
| 3199del6 | c.3067_3072delATAGTG | p.Ile1023_Val1024del | CF-causing ^{GD} |
| Y1032C | c.3095A>G | p.Tyr1032Cys | Varying clinical consequence |

⁷ Full variant name is c.2589_2599delAATTTGGTCT

⁸ Full variant name is c.2859_2890delACATTCTGTTCTTCAAGCACCTATGTCAACCC

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|-------------|--------------------|--------------------|------------------------------|
| T1036N | c.3107C>A | p.Thr1036Asn | CF-causing |
| Q1042X | c.3124C>T | p.Gln1042Ter | CF-causing |
| 3271delGG | c.3139_3139+1delGG | p.? ⁹ | CF-causing |
| 3272-26A>G | c.3140-26A>G | p.? | CF-causing |
| F1052V | c.3154T>G | p.Phe1052Val | Varying clinical consequence |
| H1054D | c.3160C>G | p.His1054Asp | CF-causing |
| G1061R | c.3181G>C | p.Gly1061Arg | CF-causing |
| L1065P | c.3194T>C | p.Leu1065Pro | CF-causing |
| R1066C | c.3196C>T | p.Arg1066Cys | CF-causing |
| R1066H | c.3197G>A | p.Arg1066His | CF-causing |
| G1069R | c.3205G>A | p.Gly1069Arg | Varying clinical consequence |
| R1070W | c.3208C>T | p.Arg1070Trp | Varying clinical consequence |
| R1070Q | c.3209G>A | p.Arg1070Gln | Varying clinical consequence |
| 3349insT | c.3217dupT | p.Tyr1073LeufsTer3 | CF-causing |
| F1074L | c.3220T>C | p.Phe1074Leu | Varying clinical consequence |
| F1074L | c.3222T>G | p.Phe1074Leu | Varying clinical consequence |
| F1074L | c.3222T>A | p.Phe1074Leu | Varying clinical consequence |
| L1077P | c.3230T>C | p.Leu1077Pro | CF-causing |
| W1089X | c.3266G>A | p.Trp1089Ter | CF-causing |
| Y1092X | c.3276C>A | p.Tyr1092Ter | CF-causing |
| Y1092X | c.3276C>G | p.Tyr1092Ter | CF-causing |
| W1098R | c.3292T>C | p.Trp1098Arg | CF-causing |
| W1098X | c.3293G>A | p.Trp1098Ter | CF-causing |
| W1098X | c.3294G>A | p.Trp1098Ter | CF-causing |
| W1098C | c.3294G>C | p.Trp1098Cys | CF-causing |
| W1098C | c.3294G>T | p.Trp1098Cys | CF-causing |
| F1099L | c.3297C>A | p.Phe1099Leu | Varying clinical consequence |
| Q1100P | c.3299A>C | p.Gln1100Pro | CF-causing ^{GD} |
| M1101K | c.3302T>A | p.Met1101Lys | CF-causing |
| M1101R | c.3302T>G | p.Met1101Arg | CF-causing |
| R1102X | c.3304A>T | p.Arg1102Ter | CF-causing |
| E1104X | c.3310G>T | p.Glu1104Ter | CF-causing |
| S1118F | c.3353C>T | p.Ser1118Phe | CF-causing |
| 3500-2A>G | c.3368-2A>G | p.? | CF-causing |
| W1145X | c.3435G>A | p.Trp1145Ter | CF-causing |
| D1152H | c.3454G>C | p.Asp1152His | Varying clinical consequence |
| V1153E | c.3458T>A | p.Val1153Glu | Varying clinical consequence |
| 3600G>A | c.3468G>A | p.? | CF-causing |
| 3600+2insT | c.3468+2dupT | p.? | CF-causing |
| 3600+5G>A | c.3468+5G>A | p.? | CF-causing |
| R1158X | c.3472C>T | p.Arg1158Ter | CF-causing |

⁹ Alternative historical name for this variant is p. Gly1047GlnfsTer28

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|---------------|-------------------------------------|---------------------|------------------------------|
| S1159P | c.3475T>C | p.Ser1159Pro | CF-causing |
| S1159F | c.3476C>T | p.Ser1159Phe | CF-causing |
| R1162X | c.3484C>T | p.Arg1162Ter | CF-causing |
| 3659delC | c.3528delC | p.Lys1177SerfsTer15 | CF-causing |
| 3667ins4 | c.3532_3535dupTCAA | p.Thr1179IlefsTer17 | CF-causing |
| S1196X | c.3587C>G | p.Ser1196Ter | CF-causing |
| 3737delA | c.3605delA | p.Asp1202AlafsTer9 | CF-causing |
| W1204X | c.3611G>A | p.Trp1204Ter | CF-causing |
| W1204X | c.3612G>A | p.Trp1204Ter | CF-causing |
| 3791delC | c.3659delC | p.Thr1220LysfsTer8 | CF-causing |
| 3821delT | c.3691delT | p.Ser1231ProfsTer4 | CF-causing |
| I1234V | c.3700A>G | p.Ile1234Val | CF-causing |
| 3849G>A | c.3717G>A | p.? | CF-causing |
| 3849+4A>G | c.3717+4A>G | p.? | CF-causing |
| 3849+5G>A | c.3717+5G>A | p.? | CF-causing |
| 3849+40A>G | c.3717+40A>G | p.? | CF-causing |
| 3849+10kbC>T | c.3718-2477C>T | p.? | CF-causing |
| 3850-1G>A | c.3718-1G>A | p.? | CF-causing |
| 3850-3T>G | c.3718-3T>G | p.? | CF-causing |
| V1240G | c.3719T>G | p.Val1240Gly | CF-causing |
| G1244E | c.3731G>A | p.Gly1244Glu | CF-causing |
| T1246I | c.3737C>T | p.Thr1246Ile | Varying clinical consequence |
| 3876delA | c.3744delA | p.Lys1250ArgfsTer9 | CF-causing |
| G1249R | c.3745G>A | p.Gly1249Arg | CF-causing |
| 3878delG | c.3747delG | p.Lys1250ArgfsTer9 | CF-causing |
| S1251N | c.3752G>A | p.Ser1251Asn | CF-causing |
| L1254X | c.3761T>G | p.Leu1254Ter | CF-causing |
| S1255P | c.3763T>C | p.Ser1255Pro | CF-causing |
| S1255X | c.3764C>A | p.Ser1255Ter | CF-causing |
| 3905insT | c.3773dupT | p.Leu1258PhefsTer7 | CF-causing |
| I1269N | c.3806T>A | p.Ile1269Asn | CF-causing |
| D1270N | c.3808G>A | p.Asp1270Asn | Varying clinical consequence |
| W1282X | c.3846G>A | p.Trp1282Ter | CF-causing |
| W1282X;R1283M | c.3846_3848delinsAAT ^{10#} | p.Trp1282Ter | CF-causing |
| R1283M | c.3848G>T | p.Arg1283Met | CF-causing |
| Q1291R | c.3872A>G | p.Gln1291Arg | Varying clinical consequence |
| Q1291H | c.3873G>C [#] | p.Gln1291His | Varying clinical consequence |
| 4005+1G>A | c.3873+1G>A | p.? | CF-causing |
| 4005+2T>C | c.3873+2T>C | p.? | CF-causing |
| 4010del4 | c.3883_3886delATTT | p.Ile1295PhefsTer32 | CF-causing |
| 4015delA | c.3883delA | p.Ile1295PhefsTer33 | CF-causing |

¹⁰Alternative historical names for this variant are c.[3846G>A;3848G>T] and p.[Trp1282Ter;Arg1283Met]

| Legacy Name | cDNA | Predicted Protein | CFTR2 10January2020 |
|---------------------|------------------------|---------------------|------------------------------|
| 4016insT (4021dupT) | c.3889dupT | p.Ser1297PhefsTer5 | CF-causing |
| 4022insT | c.3891dupT | p.Gly1298TrpfsTer4 | CF-causing |
| 4040delA | c.3908delA | p.Asn1303ThrfsTer25 | CF-causing |
| N1303K | c.3909C>G | p.Asn1303Lys | CF-causing |
| Q1313X | c.3937C>T | p.Gln1313Ter | CF-causing |
| L1324P | c.3971T>C | p.Leu1324Pro | CF-causing |
| Q1330X | c.3988C>T | p.Gln1330Ter | CF-causing |
| L1335P | c.4004T>C | p.Leu1335Pro | CF-causing |
| 4168delCTAAGCC | c.4036_4042delCTAAGCC | p.Leu1346MetfsTer6 | CF-causing |
| G1349D | c.4046G>A | p.Gly1349Asp | CF-causing |
| 4209TGTT>AA | c.4077_4080delinsAA | p.Val1360ThrfsTer3 | CF-causing |
| 4218insT | c.4086dupT | p.Lys1363Ter | CF-causing |
| I1366N | c.4097T>A [#] | p.Ile1366Asn | CF-causing |
| E1371X | c.4111G>T | p.Glu1371Ter | CF-causing |
| H1375P | c.4124A>C | p.His1375Pro | CF-causing |
| 4259delI5 | c.4127_4131delTGGAT | p.Leu1376SerfsTer8 | CF-causing |
| 4271delC | c.4139delC | p.Thr1380AsnfsTer4 | CF-causing ^{GD} |
| Q1382X | c.4144C>T | p.Gln1382Ter | CF-causing |
| 4279insA | c.4147dupA | p.Ile1383AsnfsTer3 | CF-causing |
| 4326delTC | c.4197_4198delCT | p.Cys1400Ter | CF-causing |
| Q1411X | c.4231C>T | p.Gln1411Ter | CF-causing |
| Q1412X | c.4234C>T | p.Gln1412Ter | CF-causing |
| 4374+1G>T | c.4242+1G>T | p.? | CF-causing |
| 4374+1G>A | c.4242+1G>A | p.? | CF-causing |
| 4382delA | c.4251delA | p.Glu1418ArgfsTer14 | CF-causing |
| 4428insGA | c.4300_4301dupAG | p.Ser1435GlyfsTer14 | CF-causing |
| S1455X | c.4364C>G [#] | p.Ser1455Ter | Varying clinical consequence |
| Q1476X | c.4426C>T [#] | p.Gln1476Ter | Varying clinical consequence |
| CFTRdele2,3 | c.54-5940_273+10250del | p.? ¹¹ | CF-causing |
| CFTRdele22,23 | c.3964-78_4242+577del | p.? | CF-causing |

HGVS nomenclature version 20.05

- Reference sequences: coding variants NM_000492.3, NP_000483.3
- Reference sequences: non-coding variants NC_000007.13 (NM_000492.3)

Assay QC metrics:

Analytical sensitivity for single nucleotide variants (95% CI): 100% (93.2-100%)

Analytical sensitivity for insertions/deletions (95% CI): 100% (95.3-100%)

Analytical specificity (95% CI): 100% (99.9-100%)

Minimum read depth: >100

¹¹ Alternative historical name for this variant is p.Ser18ArgfsX16