# *F12* (NM_000505.4) - cDNA + Protein - 2026-06-26

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ACTCCTGGAT AGGCAGCTGG ACCAACGGAC GGATGCCATG AGGGCTCTGC 13
                                        Met ArgAlaLeuL 5

TGCTCCTGGG GTTCCTGCTG GTGAGCTTGG AGTCAACACT TTCGATTCCA 63
euLeuLeuGl yPheLeuLeu ValSerLeuG luSerThrLe uSerIlePro 21

CCTTGGGAAG CCCCCAAGGA GCATAAGTAC AAAGCTGAAG AGCACACAGT 113
ProTrpGluA laProLysGl uHisLysTyr LysAlaGluG luHisThrVa 38

CGTTCTCACT GTCACCGGGG AGCCCTGCCA CTTCCCCTTC CAGTACCACC 163
lValLeuThr ValThrGlyG luProCysHi sPheProPhe GlnTyrHisA 55

GGCAGCTGTA CCACAAATGT ACCCACAAGG GCCGGCCAGG CCCTCAGCCC 213
rgGlnLeuTy rHisLysCys ThrHisLysG lyArgProGl yProGlnPro 71

TGGTGTGCTA CCACCCCCAA CTTTGATCAG GACCAGCGAT GGGGATACTG 263
TrpCysAlaT hrThrProAs nPheAspGln AspGlnArgT rpGlyTyrCy 88

TTTGGAGCCC AAGAAAGTGA AAGACCACTG CAGCAAACAC AGCCCCTGCC 313
sLeuGluPro LysLysValL ysAspHisCy sSerLysHis SerProCysG 105

AGAAAGGAGG GACCTGTGTG AACATGCCAA GCGGCCCCCA CTGTCTCTGT 363
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lnLysGlyGl yThrCysVal AsnMetProS erGlyProHi sCysLeuCys 121

CCACAACACC TCACTGGAAA CCACTGCCAG AAAGAGAAGT GCTTTGAGCC 413
ProGlnHisL euThrGlyAs nHisCysGln LysGluLysC ysPheGluPr 138

TCAGCTTCTC CGGTTTTTCC ACAAGAATGA GATATGGTAT AGAACTGAGC 463
oGlnLeuLeu ArgPhePheH isLysAsnGl uIleTrpTyr ArgThrGluG 155

AAGCAGCTGT GGCCAGATGC CAGTGCAAGG GTCCTGATGC CCACTGCCAG 513
lnAlaAlaVa lAlaArgCys GlnCysLysG lyProAspAl aHisCysGln 171

CGGCTGGCCA GCCAGGCCTG CCGCACCAAC CCGTGCCTCC ATGGGGGTCG 563
ArgLeuAlaS erGlnAlaCy sArgThrAsn ProCysLeuH isGlyGlyAr 188

CTGCCTAGAG GTGGAGGGCC ACCGCCTGTG CCACTGCCCG GTGGGCTACA 613
gCysLeuGlu ValGluGlyH isArgLeuCy sHisCysPro ValGlyTyrT 205

CCGGAGCCTT CTGCGACGTG GACACCAAGG CAAGCTGCTA TGATGGCCGC 663
hrGlyAlaPh eCysAspVal AspThrLysA laSerCysTy rAspGlyArg 221

GGGCTCAGCT ACCGCGGCCT GGCCAGGACC ACGCTCTCGG GTGCGCCCTG 713
GlyLeuSerT yrArgGlyLe uAlaArgThr ThrLeuSerG lyAlaProCy 238

TCAGCCGTGG GCCTCGGAGG CCACCTACCG GAACGTGACT GCCGAGCAAG 763
sGlnProTrp AlaSerGluA laThrTyrAr gAsnValThr AlaGluGlnA 255

CGCGGAACTG GGGACTGGGC GGCCACGCCT TCTGCCGGAA CCCGGACAAC 813
laArgAsnTr pGlyLeuGly GlyHisAlaP heCysArgAs nProAspAsn 271
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GACATCCGCC CGTGGTGCTT CGTGCTGAAC CGCGACCGGC TGAGCTGGGA 863  W268R
AspIleArgP roTrpCysPh eValLeuAsn ArgAspArgL euSerTrpGl 288

GTACTGCGAC CTGGCACAGT GCCAGACCCC AACCCAGGCG GCGCCTCCGA 913
uTyrCysAsp LeuAlaGlnC ysGlnThrPr oThrGlnAla AlaProProT 305

CCCCGGTGTC CCCTAGGCTT CATGTCCCAC TCATGCCCGC GCAGCCGGCA 963
hrProValSe rProArgLeu HisValProL euMetProAl aGlnProAla 321

CCGCCGAAGC CTCAGCCCAC GACCCGGACC CCGCCTCAGT CCCAGACCCC 1013
ProProLysP roGlnProTh rThrArgThr ProProGlnS erGlnThrPr 338

GGGAGCCTTG CCGGCGAAGC GGGAGCAGCC GCCTTCCCTG ACCAGGAACG 1063
oGlyAlaLeu ProAlaLysA rgGluGlnPr oProSerLeu ThrArgAsnG 355

GCCCACTGAG CTGCGGGCAG CGGCTCCGCA AGAGTCTGTC TTCGATGACC 1113
lyProLeuSe rCysGlyGln ArgLeuArgL ysSerLeuSe rSerMetThr 371

CGCGTCGTTG GCGGGCTGGT GGCGCTACGC GGGGCGCACC CCTACATCGC 1163
ArgValValG lyGlyLeuVa lAlaLeuArg GlyAlaHisP roTyrIleAl 388

CGCGCTGTAC TGGGGCCACA GTTTCTGCGC CGGCAGCCTC ATCGCCCCCT 1213
aAlaLeuTyr TrpGlyHisS erPheCysAl aGlySerLeu IleAlaProC 405

GCTGGGTGCT GACGGCCGCT CACTGCCTGC AGGACCGGCC CGCACCCGAG 1263
ysTrpValLe uThrAlaAla HisCysLeuG lnAspArgPr oAlaProGlu 421
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GATCTGACGG TGGTGCTCGG CCAGGAACGC CGTAACCACA GCTGTGAGCC 1313
AspLeuThrV alValLeuGl yGlnGluArg ArgAsnHisS erCysGluPr 438

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oCysGlnThr LeuAlaValA rgSerTyrAr gLeuHisGlu AlaPheSerP 455

CCGTCAGCTA CCAGCACGAC CTGGCTCTGT TGCGCCTTCA GGAGGATGCG 1413
roValSerTy rGlnHisAsp LeuAlaLeuL euArgLeuGl nGluAspAla 471

GACGGCAGCT GCGCGCTCCT GTCGCCTTAC GTTCAGCCGG TGTGCCTGCC 1463
AspGlySerC ysAlaLeuLe uSerProTyr ValGlnProV alCysLeuPr 488

AAGCGGCGCC GCGCGACCCT CCGAGACCAC GCTCTGCCAG GTGGCCGGCT 1513
oSerGlyAla AlaArgProS erGluThrTh rLeuCysGln ValAlaGlyT 505

GGGGCCACCA GTTCGAGGGG GCGGAGGAAT ATGCCAGCTT CCTGCAGGAG 1563
rpGlyHisGl nPheGluGly AlaGluGluT yrAlaSerPh eLeuGlnGlu 521

GCGCAGGTAC CGTTCCTCTC CCTGGAGCGC TGCTCAGCCC CGGACGTGCA 1613
AlaGlnValP roPheLeuSe rLeuGluArg CysSerAlaP roAspValHi 538

CGGATCCTCC ATCCTCCCCG GCATGCTCTG CGCAGGGTTC CTCGAGGGCG 1663
sGlySerSer IleLeuProG lyMetLeuCy sAlaGlyPhe LeuGluGlyG 555

GCACCGATGC GTGCCAGGGT GATTCCGGAG GCCCGCTGGT GTGTGAGGAC 1713
lyThrAspAl aCysGlnGly AspSerGlyG lyProLeuVa lCysGluAsp 571

CAAGCTGCAG AGCGCCGGCT CACCCTGCAA GGCATCATCA GCTGGGGATC 1763
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GlnAlaAlaG luArgArgLe uThrLeuGln GlyIleIleS erTrpGlySe 588

GGGCTGTGGT GACCGCAACA AGCCAGGCGT CTACACCGAT GTGGCCTACT 1813
rGlyCysGly AspArgAsnL ysProGlyVa lTyrThrAsp ValAlaTyrT 605

ACCTGGCCTG GATCCGGGAG CACACCGTTT CCTGATTGCT CAGGGACTCA *15
yrLeuAlaTr pIleArgGlu HisThrValS erStop

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GGCAAGATTG TGTCCCATTC CCCCAGTGCG GCCAGCTCCG CGCCAGGATG *115
GCGCAGGAAC TCAATAAAGT GCTTTGAAAA TGCTGA
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