

SEQUENZPROTOKOLL

<110> Rheinische Friedrich-Wilhelms Universität Bonn

<120> Mutierte DNA-Polymerasen mit erhöhter
Fehlpaarungs-Diskriminierung

<130> 050188wo JH/PCH

<140>

<141>

<150> DE 102004005885.7

<151> 2004-02-05

<160> 29

<170> PatentIn Ver. 2.1

<210> 1

<211> 2787

<212> DNA

<213> Künstliche Sequenz

<220>

<223> Beschreibung der künstlichen Sequenz: E. coli
Wildtyp Klenow Fragment der DNA Polymerase 1

<400> 1

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<210> 2

<211> 928

<212> PRT

<213> Künstliche Sequenz

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<223> Beschreibung der künstlichen Sequenz: E.coli
Klenow Fragment der DNA Polymerase 1

<400> 2

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Tyr Leu Tyr Arg Ala Tyr His Ala Phe Pro Pro Leu Thr Asn Ser Ala
          20           25           30

```

```

Gly Glu Pro Thr Gly Ala Met Tyr Gly Val Leu Asn Met Leu Arg Ser
          35           40           45

```

```

Leu Ile Met Gln Tyr Lys Pro Thr His Ala Ala Val Val Phe Asp Ala
          50           55           60

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```

Lys Gly Lys Thr Phe Arg Asp Glu Leu Phe Glu His Tyr Lys Ser His
          65           70           75           80

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```

Arg Pro Pro Met Pro Asp Asp Leu Arg Ala Gln Ile Glu Pro Leu His
          85           90           95

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Ala Met Val Lys Ala Met Gly Leu Pro Leu Leu Ala Val Ser Gly Val
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Glu Ala Asp Asp Val Ile Gly Thr Leu Ala Arg Glu Ala Glu Lys Ala
          115           120           125

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Gly Arg Pro Val Leu Ile Ser Thr Gly Asp Lys Asp Met Ala Gln Leu
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Val Thr Pro Asn Ile Thr Leu Ile Asn Thr Met Thr Asn Thr Ile Leu

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Trp Leu Lys His Lys Thr Ile Thr Phe Glu Glu Ile Ala Gly Lys Gly
 465 470 475 480

Lys Asn Gln Leu Thr Phe Asn Gln Ile Ala Leu Glu Glu Ala Gly Arg
 485 490 495

Tyr Ala Ala Glu Asp Ala Asp Val Thr Leu Gln Leu His Leu Lys Met
 500 505 510

Trp Pro Asp Leu Gln Lys His Lys Gly Pro Leu Asn Val Phe Glu Asn
 515 520 525

Ile Glu Met Pro Leu Val Pro Val Leu Ser Arg Ile Glu Arg Asn Gly
 530 535 540

Val Lys Ile Asp Pro Lys Val Leu His Asn His Ser Glu Glu Leu Thr
 545 550 555 560

Leu Arg Leu Ala Glu Leu Glu Lys Lys Ala His Glu Ile Ala Gly Glu
 565 570 575

Glu Phe Asn Leu Ser Ser Thr Lys Gln Leu Gln Thr Ile Leu Phe Glu
 580 585 590

Lys Gln Gly Ile Lys Pro Leu Lys Lys Thr Pro Gly Gly Ala Pro Ser
 595 600 605

Thr Ser Glu Glu Val Leu Glu Glu Leu Ala Leu Asp Tyr Pro Leu Pro
 610 615 620

Lys Val Ile Leu Glu Tyr Arg Gly Leu Ala Lys Leu Lys Ser Thr Tyr
 625 630 635 640

Thr Asp Lys Leu Pro Leu Met Ile Asn Pro Lys Thr Gly Arg Val His
 645 650 655

Thr Ser Tyr His Gln Ala Val Thr Ala Thr Gly Arg Leu Ser Ser Thr
 660 665 670

Asp Pro Asn Leu Gln Asn Ile Pro Val Arg Asn Glu Glu Gly Arg Arg
 675 680 685

Ile Arg Gln Ala Phe Ile Ala Pro Glu Asp Tyr Val Ile Val Ser Ala
 690 695 700

Asp Tyr Ser Gln Ile Glu Leu Arg Ile Met Ala His Leu Ser Arg Asp
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Lys Gly Leu Leu Thr Ala Phe Ala Glu Gly Lys Asp Ile His Arg Ala
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Thr Ala Ala Glu Val Phe Gly Leu Pro Leu Glu Thr Val Thr Ser Glu
 740 745 750

Gln Arg Arg Ser Ala Lys Ala Ile Asn Phe Gly Leu Ile Tyr Gly Met
 755 760 765

Ser Ala Phe Gly Leu Ala Arg Gln Leu Asn Ile Pro Arg Lys Glu Ala
770 775 780

Gln Lys Tyr Met Asp Leu Tyr Phe Glu Arg Tyr Pro Gly Val Leu Glu
785 790 795 800

Tyr Met Glu Arg Thr Arg Ala Gln Ala Lys Glu Gln Gly Tyr Val Glu
805 810 815

Thr Leu Asp Gly Arg Arg Leu Tyr Leu Pro Asp Ile Lys Ser Ser Asn
820 825 830

Gly Ala Arg Arg Ala Ala Ala Glu Arg Ala Ala Ile Asn Ala Pro Met
835 840 845

Gln Gly Thr Ala Ala Asp Ile Ile Lys Arg Ala Met Ile Ala Val Asp
850 855 860

Ala Trp Leu Gln Ala Glu Gln Pro Arg Val Arg Met Ile Met Gln Val
865 870 875 880

His Asp Glu Leu Val Phe Glu Val His Lys Asp Asp Val Asp Ala Val
885 890 895

Ala Lys Gln Ile His Gln Leu Met Glu Asn Cys Thr Arg Leu Asp Val
900 905 910

Pro Leu Leu Val Glu Val Gly Ser Gly Glu Asn Trp Asp Gln Ala His
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<211> 2499

<212> DNA

<213> Künstliche Sequenz

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<223> Beschreibung der künstlichen Sequenz: Wildtyp Taq
Polymerase

<400> 3

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<210> 4

<211> 832

<212> PRT

<213> Künstliche Sequenz

<220>

<223> Beschreibung der künstlichen Sequenz: Wildtyp Taq
Polymerase

<400> 4

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Val Asp Gly His His Leu Ala Tyr Arg Thr Phe His Ala Leu Lys Gly
          20           25           30

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```

Leu Thr Thr Ser Arg Gly Glu Pro Val Gln Ala Val Tyr Gly Phe Ala
          35           40           45

```

```

Lys Ser Leu Leu Lys Ala Leu Lys Glu Asp Gly Asp Ala Val Ile Val
          50           55           60

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```

Val Phe Asp Ala Lys Ala Pro Ser Phe Arg His Glu Ala Tyr Gly Gly
          65           70           75           80

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```

Tyr Lys Ala Gly Arg Ala Pro Thr Pro Glu Asp Phe Pro Arg Gln Leu
          85           90           95

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 Val Pro Gly Tyr Glu Ala Asp Asp Val Leu Ala Ser Leu Ala Lys Lys
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 Ala Glu Lys Glu Gly Tyr Glu Val Arg Ile Leu Thr Ala Asp Lys Asp
 130 135 140
 Leu Tyr Gln Leu Leu Ser Asp Arg Ile His Val Leu His Pro Glu Gly
 145 150 155 160
 Tyr Leu Ile Thr Pro Ala Trp Leu Trp Glu Lys Tyr Gly Leu Arg Pro
 165 170 175
 Asp Gln Trp Ala Asp Tyr Arg Ala Leu Thr Gly Asp Glu Ser Asp Asn
 180 185 190
 Leu Pro Gly Val Lys Gly Ile Gly Glu Lys Thr Ala Arg Lys Leu Leu
 195 200 205
 Glu Glu Trp Gly Ser Leu Glu Ala Leu Leu Lys Asn Leu Asp Arg Leu
 210 215 220
 Lys Pro Ala Ile Arg Glu Lys Ile Leu Ala His Met Asp Asp Leu Lys
 225 230 235 240
 Leu Ser Trp Asp Leu Ala Lys Val Arg Thr Asp Leu Pro Leu Glu Val
 245 250 255
 Asp Phe Ala Lys Arg Arg Glu Pro Asp Arg Glu Arg Leu Arg Ala Phe
 260 265 270
 Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly Leu Leu
 275 280 285
 Glu Ser Pro Lys Ala Leu Glu Glu Ala Pro Trp Pro Pro Pro Glu Gly
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 Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp
 305 310 315 320
 Leu Leu Ala Leu Ala Ala Ala Arg Gly Gly Arg Val His Arg Ala Pro
 325 330 335
 Glu Pro Tyr Lys Ala Leu Arg Asp Leu Lys Glu Ala Arg Gly Leu Leu
 340 345 350
 Ala Lys Asp Leu Ser Val Leu Ala Leu Arg Glu Gly Leu Gly Leu Pro
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 Pro Gly Asp Asp Pro Met Leu Leu Ala Tyr Leu Leu Asp Pro Ser Asn
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 Thr Thr Pro Glu Gly Val Ala Arg Arg Tyr Gly Gly Glu Trp Thr Glu
 385 390 395 400
 Glu Ala Gly Glu Arg Ala Ala Leu Ser Glu Arg Leu Phe Ala Asn Leu

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Tyr	Ile	Asp	Pro	Leu	Pro	Asp	Leu	Ile	His	Pro	Arg	Thr	Gly	Arg	Leu		
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Antisense-Primer

<400> 7
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<210> 8
<211> 20
<212> DNA
<213> Künstliche Sequenz

<220>
<223> Beschreibung der künstlichen Sequenz: Primer
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<400> 8
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<210> 9
<211> 90
<212> DNA
<213> Künstliche Sequenz

<220>
<223> Beschreibung der künstlichen Sequenz: Matrize
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tccttgaca ggcaaggaat acaggtattt 90

<210> 10
<211> 90
<212> DNA
<213> Künstliche Sequenz

<220>
<223> Beschreibung der künstlichen Sequenz: Matrize
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tccttgaca ggcgaggaat acaggtattt 90

<210> 11
<211> 20
<212> DNA
<213> Künstliche Sequenz

<220>
<223> Beschreibung der künstlichen Sequenz: Primer zur
Detektion des SNPs in der humanen genomischen
Factor-V-Leiden-DNA-Sequenz

<400> 11

acaaaatacc tgtattcctn 20

<210> 12
 <211> 35
 <212> DNA
 <213> Künstliche Sequenz

<220>
 <223> Beschreibung der künstlichen Sequenz: Matrize der humanen genomischen Factor-V-Leiden-DNA-Sequenz; n=g, Wildtypmatrize; n=a, mutante Matrize

<400> 12
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<210> 13
 <211> 22
 <212> DNA
 <213> Künstliche Sequenz

<220>
 <223> Beschreibung der künstlichen Sequenz: Primer zur Detektion der humanen somatische BRAF-T1796A-Mutation

<400> 13
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<210> 14
 <211> 35
 <212> DNA
 <213> Künstliche Sequenz

<220>
 <223> Beschreibung der künstlichen Sequenz: Wildtyp Matrize des BRAF Gens; w= t, Wildtypmatrize; w = a, mutante Matrize

<400> 14
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<210> 15
 <211> 25
 <212> DNA
 <213> Künstliche Sequenz

<220>
 <223> Beschreibung der künstlichen Sequenz: Primer zur Detektion der humanen Dihydropyrimidin-Dehydrogenase (DPyD) Mutation G735A

<400> 15
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<210> 16
 <211> 38
 <212> DNA
 <213> Künstliche Sequenz

 <220>
 <223> Beschreibung der künstlichen Sequenz: Matrize
 des humanen DPyD; r = g, Wildtypmatrize; r = a,
 mutante Matrize

 <400> 16
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 <210> 17
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 <220>
 <223> Beschreibung der künstlichen Sequenz: Primer zur
 Detektion der humanen sauren Ceramidase Mutation
 A107G

 <400> 17
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 <210> 18
 <211> 33
 <212> DNA
 <213> Künstliche Sequenz

 <220>
 <223> Beschreibung der künstlichen Sequenz: Matrize der
 humanen sauren Ceramidase; r = a, Wildtypmatrize;
 r = g, mutante Matrize

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 <210> 19
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 <212> DNA
 <213> Künstliche Sequenz

 <220>
 <223> Beschreibung der künstlichen Sequenz: Primersonde
 BrafT

 <400> 19
 gaccactcc atcgagattt ct 22

 <210> 20

<211> 22
 <212> DNA
 <213> Künstliche Sequenz

 <220>
 <223> Beschreibung der künstlichen Sequenz: umgekehrter
 Primer für BRAF

 <400> 20
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 <210> 21
 <211> 239
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 <213> Künstliche Sequenz

 <220>
 <223> Beschreibung der künstlichen Sequenz: Zielmatrize
 BrafX; w = a, Braf A (Wildtyp); w = t, BrafT
 (Mutante)

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DpyDX; r = a, DpyDA (Wildtyp); r = t, DpyDT

(Mutante)

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