

## SEQUENCE LISTING

<110> Istituto Superiore di Sanità  
Tartaglia, Marco  
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<120> Diagnostic Method

<130> WA/WPP99209

<150> US 61/067,618

<151> 2008-02-29

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<170> PatentIn version 3.3

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Glu Gly Asp Asn Thr Gly Glu Gln Val Ala Val Lys Ser Leu Lys Pro  
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Glu Ser Gly Gly Asn His Ile Ala Asp Leu Lys Lys Glu Ile Glu Ile  
915 920 925

Leu Arg Asn Leu Tyr His Glu Asn Ile Val Lys Tyr Lys Gly Ile Cys  
930 935 940

Thr Glu Asp Gly Gly Asn Gly Ile Lys Leu Ile Met Glu Phe Leu Pro  
945 950 955 960

Ser Gly Ser Leu Lys Glu Tyr Leu Pro Lys Asn Lys Asn Lys Ile Asn  
965 970 975

Leu Lys Gln Gln Leu Lys Tyr Ala Val Gln Ile Cys Lys Gly Met Asp  
980 985 990

Tyr Leu Gly Ser Arg Gln Tyr Val His Arg Asp Leu Ala Ala Arg Asn  
995 1000 1005

Val Leu Val Glu Ser Glu His Gln Val Lys Ile Gly Asp Phe Gly  
1010 1015 1020

Leu Thr Lys Ala Ile Glu Thr Asp Lys Glu Tyr Tyr Thr Val Lys  
1025 1030 1035

Asp Asp Arg Asp Ser Pro Val Phe Trp Tyr Ala Pro Glu Cys Leu  
1040 1045 1050

Met Gln Ser Lys Phe Tyr Ile Ala Ser Asp Val Trp Ser Phe Gly  
1055 1060 1065

Val Thr Leu His Glu Leu Leu Thr Tyr Cys Asp Ser Asp Ser Ser  
 1070 1075 1080

Pro Met Ala Leu Phe Leu Lys Met Ile Gly Pro Thr His Gly Gln  
 1085 1090 1095

Met Thr Val Thr Arg Leu Val Asn Thr Leu Lys Glu Gly Lys Arg  
 1100 1105 1110

Leu Pro Cys Pro Pro Asn Cys Pro Asp Glu Val Tyr Gln Leu Met  
 1115 1120 1125

Arg Lys Cys Trp Glu Phe Gln Pro Ser Asn Arg Thr Ser Phe Gln  
 1130 1135 1140

Asn Leu Ile Glu Gly Phe Glu Ala Leu Leu Lys  
 1145 1150

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 <211> 1154  
 <212> PRT  
 <213> Homo sapiens

<400> 3

Met Gln Tyr Leu Asn Ile Lys Glu Asp Cys Asn Ala Met Ala Phe Cys  
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Ala Lys Met Arg Ser Ser Lys Lys Thr Glu Val Asn Leu Glu Ala Pro  
 20 25 30

Glu Pro Gly Val Glu Val Ile Phe Tyr Leu Ser Asp Arg Glu Pro Leu  
 35 40 45

Arg Leu Gly Ser Gly Glu Tyr Thr Ala Glu Glu Leu Cys Ile Arg Ala  
 50 55 60

Ala Gln Ala Cys Arg Ile Ser Pro Leu Cys His Asn Leu Phe Ala Leu  
 65 70 75 80

Tyr Asp Glu Asn Thr Lys Leu Trp Tyr Ala Pro Asn Arg Thr Ile Thr  
 85 90 95

Val Asp Asp Lys Met Ser Leu Arg Leu His Tyr Arg Met Arg Phe Tyr  
 100 105 110

Phe Thr Asn Trp His Gly Thr Asn Asp Asn Glu Gln Ser Val Trp Arg  
 115 120 125

His Ser Pro Lys Lys Gln Lys Asn Gly Tyr Glu Lys Lys Lys Ile Pro  
 130 135 140

Asp Ala Thr Pro Leu Leu Asp Ala Ser Ser Leu Glu Tyr Leu Phe Ala  
 145 150 155 160

Gln Gly Gln Tyr Asp Leu Val Lys Cys Leu Ala Pro Ile Arg Asp Pro  
 165 170 175

Lys Thr Glu Gln Asp Gly His Asp Ile Glu Asn Glu Cys Leu Gly Met  
 180 185 190

Ala Val Leu Ala Ile Ser His Tyr Ala Met Met Lys Lys Met Gln Leu  
 195 200 205

Pro Glu Leu Pro Lys Asp Ile Ser Tyr Lys Arg Tyr Ile Pro Glu Thr  
 210 215 220

Leu Asn Lys Ser Ile Arg Gln Arg Asn Leu Leu Thr Arg Met Arg Ile  
 225 230 235 240

Asn Asn Val Phe Lys Asp Phe Leu Lys Glu Phe Asn Asn Lys Thr Ile  
 245 250 255

Cys Asp Ser Ser Val Ser Thr His Asp Leu Lys Val Lys Tyr Leu Ala  
 260 265 270

Thr Leu Glu Thr Leu Thr Lys His Tyr Gly Ala Glu Ile Phe Glu Thr  
 275 280 285

Ser Met Leu Leu Ile Ser Ser Glu Asn Glu Met Asn Trp Phe His Ser  
 290 295 300

Asn Asp Gly Gly Asn Val Leu Tyr Tyr Glu Val Met Val Thr Gly Asn  
 305 310 315 320

Leu Gly Ile Gln Trp Arg His Lys Pro Asn Val Val Ser Val Glu Lys  
 325 330 335

Glu Lys Asn Lys Leu Lys Arg Lys Lys Leu Glu Asn Lys Asp Lys Lys  
 340 345 350

Asp Glu Glu Lys Asn Lys Ile Arg Glu Glu Trp Asn Asn Phe Ser Phe  
 355 360 365

Phe Pro Glu Ile Thr His Ile Val Ile Lys Glu Ser Val Val Ser Ile  
 370 375 380

Asn Lys Gln Asp Asn Lys Lys Met Glu Leu Lys Leu Ser Ser His Glu  
 385 390 395 400

Glu Ala Leu Ser Phe Val Ser Leu Val Asp Gly Tyr Phe Arg Leu Thr  
 405 410 415

Ala Asp Ala His His Tyr Leu Cys Thr Asp Val Ala Pro Pro Leu Ile  
 420 425 430

Val His Asn Ile Gln Asn Gly Cys His Gly Pro Ile Cys Thr Glu Tyr  
 435 440 445

Ala Ile Asn Lys Leu Arg Gln Glu Gly Ser Glu Glu Gly Met Tyr Val  
 450 455 460

Leu Arg Trp Ser Cys Thr Asp Phe Asp Asn Ile Leu Met Thr Val Thr  
 465 470 475 480

Cys Phe Glu Lys Ser Glu Gln Val Gln Gly Ala Gln Lys Gln Phe Lys  
 485 490 495

Asn Phe Gln Ile Glu Val Gln Lys Gly Arg Tyr Ser Leu His Gly Ser  
 500 505 510

Asp Arg Ser Phe Pro Ser Leu Gly Asp Leu Met Ser His Leu Lys Lys  
 515 520 525

Gln Ile Leu Arg Thr Asp Asn Ile Ser Phe Met Leu Lys Arg Cys Cys  
 530 535 540

Gln Pro Lys Pro Arg Glu Ile Ser Asn Leu Leu Val Ala Thr Lys Lys  
 545 550 555 560

Ala Gln Glu Trp Gln Pro Val Tyr Pro Met Ser Gln Leu Ser Phe Asp  
 565 570 575

Arg Ile Leu Lys Lys Asp Leu Val Gln Gly Glu His Leu Gly Arg Gly

				580				585				590			
Thr	Arg	Thr	His	Ile	Tyr	Ser	Gly	Thr	Leu	Met	Asp	Tyr	Lys	Asp	Asp
		595					600					605			
Glu	Gly	Thr	Ser	Glu	Glu	Lys	Lys	Ile	Lys	Val	Ile	Leu	Lys	Val	Leu
		610					615					620			
Asp	Pro	Ser	His	Arg	Asp	Ile	Ser	Leu	Ala	Phe	Phe	Glu	Ala	Ala	Ser
		625					630					635			
Met	Met	Arg	Gln	Val	Ser	His	Lys	His	Ile	Val	Tyr	Leu	Tyr	Gly	Val
				645					650						
Cys	Val	Arg	Asp	Val	Glu	Asn	Ile	Met	Val	Glu	Glu	Phe	Val	Glu	Gly
			660					665							
Gly	Pro	Leu	Asp	Leu	Phe	Met	His	Arg	Lys	Ser	Asp	Val	Leu	Thr	Thr
		675					680								
Pro	Trp	Lys	Phe	Lys	Val	Ala	Lys	Gln	Leu	Ala	Ser	Ala	Leu	Ser	Tyr
		690					695								
Leu	Glu	Asp	Lys	Asp	Leu	Val	His	Gly	Asn	Val	Cys	Thr	Lys	Asn	Leu
		705					710					715			
Leu	Leu	Ala	Arg	Glu	Gly	Ile	Asp	Ser	Glu	Cys	Gly	Pro	Phe	Ile	Lys
				725					730						
Leu	Ser	Asp	Pro	Gly	Ile	Pro	Ile	Thr	Val	Leu	Ser	Arg	Gln	Glu	Cys
			740					745							
Ile	Glu	Arg	Ile	Pro	Trp	Ile	Ala	Pro	Glu	Cys	Val	Glu	Asp	Ser	Lys
		755					760								
Asn	Leu	Ser	Val	Ala	Ala	Asp	Lys	Trp	Ser	Phe	Gly	Thr	Thr	Leu	Trp
		770					775								
Glu	Ile	Cys	Tyr	Asn	Gly	Glu	Ile	Pro	Leu	Lys	Asp	Lys	Thr	Leu	Ile
		785					790					795			
Glu	Lys	Glu	Arg	Phe	Tyr	Glu	Ser	Arg	Cys	Arg	Pro	Val	Thr	Pro	Ser
				805					810						

Cys Lys Glu Leu Ala Asp Leu Met Thr Arg Cys Met Asn Tyr Asp Pro  
820 825 830

Asn Gln Arg Pro Phe Phe Arg Ala Ile Met Arg Asp Ile Asn Lys Leu  
835 840 845

Glu Glu Gln Asn Pro Asp Ile Val Ser Arg Lys Lys Asn Gln Pro Thr  
850 855 860

Glu Val Asp Pro Thr His Phe Glu Lys Arg Phe Leu Lys Arg Ile Arg  
865 870 875 880

Asp Leu Gly Glu Gly His Phe Gly Lys Val Glu Leu Cys Arg Tyr Asp  
885 890 895

Pro Glu Asp Asn Thr Gly Glu Gln Val Ala Val Lys Ser Leu Lys Pro  
900 905 910

Glu Ser Gly Gly Asn His Ile Ala Asp Leu Lys Lys Glu Ile Glu Ile  
915 920 925

Leu Arg Asn Leu Tyr His Glu Asn Ile Val Lys Tyr Lys Gly Ile Cys  
930 935 940

Thr Glu Asp Gly Gly Asn Gly Ile Lys Leu Ile Met Glu Phe Leu Pro  
945 950 955 960

Ser Gly Ser Leu Lys Glu Tyr Leu Pro Lys Asn Lys Asn Lys Ile Asn  
965 970 975

Leu Lys Gln Gln Leu Lys Tyr Ala Val Gln Ile Cys Lys Gly Met Asp  
980 985 990

Tyr Leu Gly Ser Arg Gln Tyr Val His Arg Asp Leu Ala Ala Arg Asn  
995 1000 1005

Val Leu Val Glu Ser Glu His Gln Val Lys Ile Gly Asp Phe Gly  
1010 1015 1020

Leu Thr Lys Ala Ile Glu Thr Asp Lys Glu Tyr Tyr Thr Val Lys  
1025 1030 1035

Asp Asp Arg Asp Ser Pro Val Phe Trp Tyr Ala Pro Glu Cys Leu  
1040 1045 1050



Met	Gln	Ser	Lys	Phe	Tyr	Ile	Ala	Ser	Asp	Val	Trp	Ser	Phe	Gly
1055						1060					1065			

Val	Thr	Leu	His	Glu	Leu	Leu	Thr	Tyr	Cys	Asp	Ser	Asp	Ser	Ser
1070						1075					1080			

Pro	Met	Ala	Leu	Phe	Leu	Lys	Met	Ile	Gly	Pro	Thr	His	Gly	Gln
1085						1090					1095			

Met	Thr	Val	Thr	Arg	Leu	Val	Asn	Thr	Leu	Lys	Glu	Gly	Lys	Arg
1100						1105					1110			

Leu	Pro	Cys	Pro	Pro	Asn	Cys	Pro	Asp	Glu	Val	Tyr	Gln	Leu	Met
1115						1120					1125			

Arg	Lys	Cys	Trp	Glu	Phe	Gln	Pro	Ser	Asn	Arg	Thr	Ser	Phe	Gln
1130						1135					1140			

Asn	Leu	Ile	Glu	Gly	Phe	Glu	Ala	Leu	Leu	Lys
1145						1150				