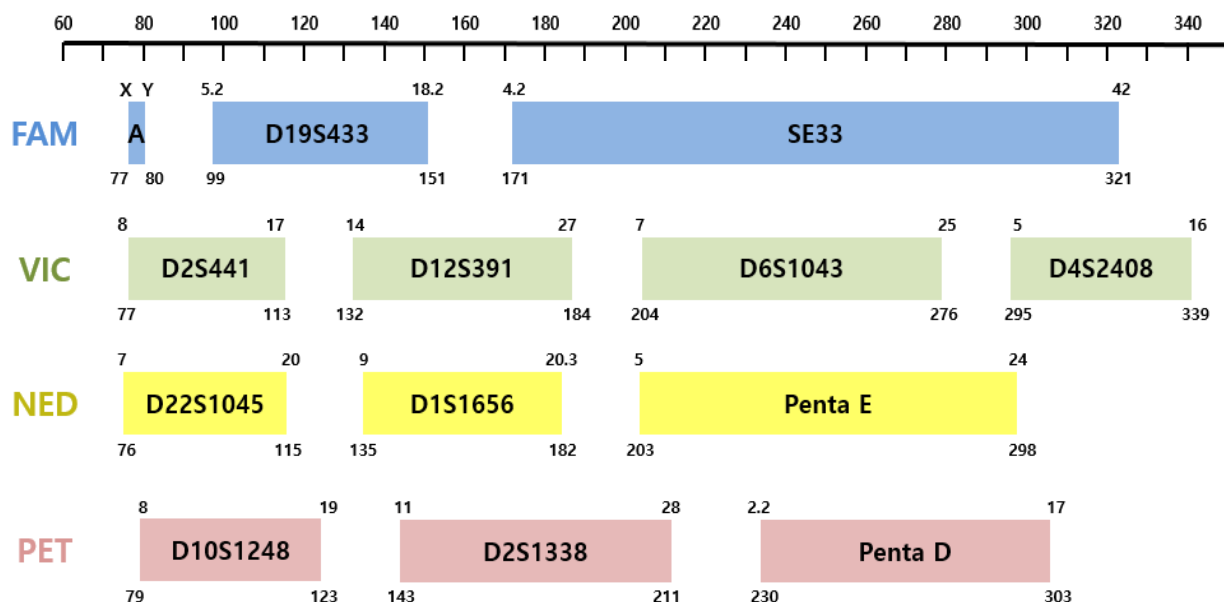


Euplex-13 PCR System Protocol

Allelic size range for Euplex-13 system



5 X Primer Mix for Multiplex PCR

Locus	Primer Sequence (5'→3')	Conc. (μM)
Amelogenin	F FAM -CCC CTT TGA AGT GGT ACC AGA G	0.85
	R GCA TGC CTA ATA TTT TCA GGG AAT AA	0.85
D19S433	F FAM -CAG CCT GGG CAA CAG AAT AA	1.60
	R ACC CAT TAC CCG AAT AAA AAT C	1.60
SE33	F FAM -GAA ACT CCG TCA AAA GAA AGA AA	4.00
	R G CC CTA CCG CTA TAG TAA CTT GC	4.00
D2S441	F GAA CTG TGG CTC ATC TAT GAA AA	0.90
	R VIC -AAG TGG CTG TGG TGT TAT GAT	0.90
D12S391	F VIC -CAG GAT CAA TGG ATG CAT AGG	1.60
	R GAG ATT TTT CAG CCT CCA TAT CA	1.60
D6S1043	F VIC -CAA GGA TGG GTG GAT CAA TAG	1.95
	R ACA CAA TTG GCT TCC CTT GT	1.95
D4S2408	F GGT AAG TGA AAA AAA TTC AGC AAG	5.00
	R VIC -GCC ATG GGG ATA AAA TCA GA	5.00

Euplex-13 PCR System Protocol (Continued)

5 X Primer Mix for Multiplex PCR (Continued)

Locus		Primer Sequence (5'→3')	Conc. (μM)
D22S1045	F	NED -TTT CCC CGA TGA TAG TAG TCT	0.85
	R	GAT CAC GCG AAT GTA TGA TTG	0.85
D1S1656	F	NED -CTG TGT TGC TCA AGG GTC AA	1.45
	R	GCA GGA TTC TTC AGA GAA ATA GAA	1.45
Penta E	F	AGC TGG GTG TGG TGG TAG GC	5.00
	R	NED -TGG GTT ATT AAT TGA GAA AAC TCC TT	5.00
D10S1248	F	ATT GAA CAA ATG AGT GAG TGG AA	5.00
	R	PET -GGA ACA ACT CTG GTT GTA TTG TCT	5.00
D2S1338	F	PET -GAA AAT GGC AAT TCC TAC TGG	3.00
	R	AGT TAA AGG ATT GCA GGA GGG	3.00
Penta D	F	AAA TAG CCA GGC ATG GTG AG	5.00
	R	PET -TGC CTA ACC TAT GGT CAT AAC G	4.50
	R	PET -TGC CTA ACC TAT GGT CAT <u>ACC</u> G	5.00

Reagents Needed

- 5 X Primer Mix for Euplex-13 system
- Gold ST*R 10 X Buffer (Promega, Madison, WI)
- AmpliTaq Gold® DNA Polymerase (Applied Biosystems, Foster City, CA)

PCR Mixture

PCR Component	Vol. (μL)
dH ₂ O	5.5
5 X Primer mix	2.0
Gold ST*R 10 X Buffer	1.0
AmpliTaq Gold (5 U/μL)	0.5
Template DNA (1 ng/μL)	1.0
Total	10.0

Thermal Cycling

95°C for 11 minutes, then:

94°C for 20 seconds
 59°C for 60 seconds
 72°C for 45 seconds
 for 29 cycles, then:

60°C for 30 minutes
 4°C soak

Euplex-13 PCR System Protocol (Continued)

Capillary Electrophoresis

Materials and Reagents Needed

- Dry heating block or thermal cycler
- 3130 Capillary Array, 36 cm (Applied Biosystems, Foster City, CA)
- Performance Optimized Polymer (POP4, Applied Biosystems, Foster City, CA)
- GeneScan™ 500 LIZ™ Size Standard
- Hi-Di™ Formamide (Applied Biosystems, Foster City, CA)

Mixture for CE run

GeneScan™ 500 LIZ™ Size Standard	0.2 µL
Hi-Di™ Formamide	10.0 µL
PCR product	1.0 µL

Denaturation

95°C for 5 minutes
4°C soak

3130 Data Collection Software

Application Type	HID
Injection Voltage	3.0 kV
Injection Time	5 seconds
Run Time	22 minutes

Download a PDF copy of
this protocol



<http://forensic.yonsei.ac.kr/protocols.html>

Genotyping result of 2800M control DNA

