

**Allele frequency distribution of the STR system ACBP2 (SE33) in a  
Population of Portugal (Central Area)**

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**System and locus:** HUMACBP2 (SE33), chromosome 5.

**Population and sample size:** Portugal (Central Area). N: 144

**Methods:** Primers (Wiegand et al. 1993)

PCR amplification conditions: 94°C - 45", 60°C - 30 ", 72°C - 30"; 30 cycles.

Electrophoretic methods: 6% polyacrylamide denaturing gel electrophoresis. The gels were run for 6 h at constant power (30w), 2500 V and 40 MA on the ABI 373 A DNA Sequencer. Typing was performed using the internal standard Genescan Rox 2500 and an allelic ladder of 23 sequenced alleles (from the EDNAP trial for the STR system ACTBP2 (SE33), 1995.)

**Results:**

**SE33**

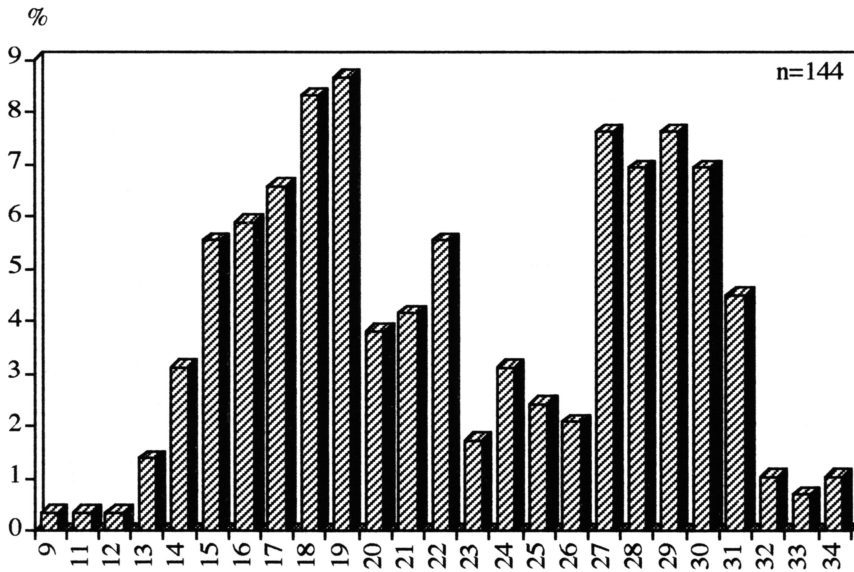
**Observed genotypes**

Gen.	Obs.	Gen.	Obs.	Gen.	Obs.	Gen.	Obs.	Gen.	Obs.
9-18	1	15-27	2	17-28	2	19-29	2	25-27	2
11-28	1	15-28	1	17-29	2	19-30	1	25-28	1
12-14	1	15-29	1	17-31	2	20-21	1	25-29	1
13-17	1	15-30	1	18-19	2	20-24	2	25-31	1
13-27	1	16-18	1	18-20	1	20-28	1	26-28	2
13-30	1	16-19	4	18-21	3	20-29	1	26-30	1
13-32	1	16-20	1	18-22	1	20-30	1	27-29	2
14-17	1	16-22	2	18-23	2	20-34	1	27-30	1
14-18	1	16-23	1	18-24	2	21-24	1	27-31	2
14-19	2	16-27	1	18-27	1	21-27	2	27-34	2
14-27	1	16-28	1	18-28	2	21-30	2	28-29	4
14-28	2	16-29	2	18-29	2	22-24	1	28-30	2
14-31	1	16-30	1	18-31	1	22-27	1	29-29	1
15-16	2	16-31	1	19-19	1	22-29	1	29-30	1
15-17	1	17-18	2	19-20	2	22-30	3	29-33	1
15-18	2	17-19	1	19-21	1	22-31	1	30-30	1
15-19	2	17-21	1	19-22	3	22-33	1	30-31	2
15-21	1	17-23	1	19-24	1	24-25	1	30-32	1
15-22	2	17-26	2	19-27	1	24-32	1	31-31	1
15-23	1	17-27	3	19-28	1	25-26	1		

### Allele frequencies

Allele	Frequency	Allele	Frequency	Allele	Frequency	Allele	Frequency
9	0.0035	17	0.0660	24	0.0313	31	0.0451
11	0.0035	18	0.0833	25	0.0243	32	0.0104
12	0.0035	19	0.0868	26	0.0208	33	0.0069
13	0.0139	20	0.0382	27	0.0764	34	0.0104
14	0.0313	21	0.0417	28	0.0694		
15	0.0556	22	0.0556	29	0.0764		
16	0.0590	23	0.0174	30	0.0695		

Exact Test P=0.18



**Comments:** This study represents our preliminary results. Further development of our database is required for such a complex system.

Nevertheless, the present data show good accordance with other published SE33 frequencies.

A total of 25 different alleles were found.

Family studies (45 families, results to be published) show, so far, no significant differences with Mendelian expectations.

**References:** Wiegand P, Budowle B, Rand S and Brinkmann B (1993) Forensic validation of the STR systems SE 33 and TC 11. *Int J Leg Med* 105:315 - 320.