

Table S1. Comparisons of HSat2,3 subfamilies with published clone sequences

| Subfamily Name | Published clone sequences matching subfamily-specific 24-mers [citation] | Published clone chromosomal localizations | Published repeat unit size (bp) |
|----------------|--|---|---------------------------------|
| HSat2A1 | cMEN375 [Jackson et al. 1992] | 10 | - |
| HSat2A2 | pUC1.77 [Cooke and Hindley 1979] | 1 | 1775 |
| | cb2 [Jeanpierre et al. 1994] | 1 | - |
| HSat2B | pHuR195 [Moyzis et al. 1987] | 16 | - |
| | HUMPPD17 [Deininger et al. 1981] | - | - |
| HSat3A1 | pW-1* [Bandyopadhyay et al. 2001] | 13,21 | 1524 |
| | cMEN219 [Jackson et al. 1993] | 10 | - |
| | QP23 [Jeanpierre et al. 1985] | 22 | - |
| HSat3A2 | pE-1* [Bandyopadhyay et al. 2001] | 13,14,21 | 1748 |
| | pK-1* [Bandyopadhyay et al. 2001] | 14,22 | 806 |
| HSat3A3 | | | |
| HSat3A4 | pTRS-47* [Choo et al. 1990] | 14,22 | 1366 |
| | pR-1* [Bandyopadhyay et al. 2001] | 13,14,15,21,22 | 1529 |
| | pR-2* [Bandyopadhyay et al. 2001] | 13,14,15,21,22 | 1556 |
| | pR-4* [Bandyopadhyay et al. 2001] | 13,14,15,21,22 | 1026 |
| | pE-2* [Bandyopadhyay et al. 2001] | 13,14,21 | 584 |
| HSat3A5 | HUMRSKPNI [Higgins et al. 1985] | 15 | 1800/3600 |
| HSat3A6 | chrY-DYZ1* [Nakahori et al. 1986] | Y | 3564 |
| HSat3B1 | | | |
| HSat3B2 | pTRS-63* [Choo et al. 1992] | 14 | 1404 |
| | HUMASAT3* [Vissel et al. 1992] | 13,14,21 | 1483 |
| HSat3B3 | HUMPPD9 [Deininger et al. 1981] | - | - |
| HSat3B4 | | | |
| HSat3B5 | pHuR98 [Moyzis et al. 1987] | 9 | - |

*these clones represent complete repeat units that have been sequenced. All others are incomplete fragments.