

Supplementary Table S3. Recovery for endogenous steroids in human serum as measured by GC-MS/MS.

| Steroid | Added [pg] | | | Recovery (RSD) [%] | | |
|--|------------|---------|---------|--------------------|-----------|-----------|
| | level 1 | level 2 | level 3 | level 1 | level 2 | level 3 |
| Pregnenolone | 10000 | 500 | 31.3 | 74 (15) | 67 (12) | 69 (13) |
| 17 α -Hydroxypregnenolone | 2000 | 500 | 31.3 | 65 (11) | 59 (6.2) | 55 (7.1) |
| 16 α -Hydroxypregnenolone | 500 | 31.3 | 7.81 | 120 (16) | 110 (6.7) | 120 (10) |
| 20 α -Dihydro pregnenolone | 2000 | 500 | 31.3 | 76 (4) | 79 (10) | 77 (6.8) |
| Dehydroepiandrosterone (DHEA) | 10000 | 500 | 31.3 | 120 (7.7) | 120 (2.7) | 110 (15) |
| 7 α -Hydroxy-DHEA | 31.3 | 7.81 | 0.488 | 110 (5.1) | 120 (4.3) | 100 (2.4) |
| 7-oxo-DHEA | 31.3 | 7.81 | 1.95 | 120 (12) | 120 (14) | 120 (14) |
| 7 β -Hydroxy-DHEA | 31.3 | 7.81 | 1.95 | 100 (5.8) | 88 (8.5) | 96 (6.6) |
| Androstenediol | 10000 | 2000 | 7.81 | 110 (4.7) | 82 (3.9) | 110 (5.7) |
| 5-Androstene-3 β ,7 α ,17 β -triol | 7.81 | 1.95 | 0.488 | 90 (12) | 78 (13) | 85 (11) |
| 5-Androstene-3 β ,7 β ,17 β -triol | 7.81 | 1.95 | 0.488 | 99 (12) | 88 (5) | 98 (11) |
| 5-Androstene-3 β ,16 α ,17 β -triol | 2000 | 500 | 125 | 82 (3.3) | 84 (17) | 83 (7.5) |
| Progesterone | 10000 | 500 | 1.95 | 87 (5.2) | 76 (12) | 69 (12) |
| 17 α -Hydroxyprogesterone | 500 | 125 | 7.81 | 82 (4.2) | 92 (1) | 77 (16) |
| 17 α ,20 α -Dihydroxy-4-pregnene-3-one | 500 | 125 | 7.81 | 88 (7.4) | 47 (5.6) | 60 (9) |
| 16 α -Hydroxyprogesterone | 2000 | 31.3 | 0.488 | 100 (18) | 92 (12) | 100 (14) |
| 20 α -Dihydroprogesterone | 500 | 31.3 | 1.95 | 89 (3.6) | 90 (6.4) | 99 (11) |
| Androstenedione | 125 | 31.3 | 7.81 | 120 (13) | 120 (7.2) | 110 (8.9) |
| Testosterone | 125 | 31.3 | 7.81 | 110 (10) | 110 (7.6) | 120 (2.9) |
| Epitestosterone | 2000 | 500 | 125 | 85 (6.3) | 99 (7.6) | 100 (5) |
| 16 α -Hydroxytestosterone | 500 | 125 | 31.3 | 74 (14) | 66 (13) | 58 (2.6) |
| 5 α -Dihydrotestosterone | 31.3 | 7.81 | 1.95 | 83 (6.1) | 79 (8.1) | 82 (12) |
| Estrone | 10000 | 2000 | 31.3 | 95 (11) | 110 (6.5) | 95 (16) |
| Estradiol | 2000 | 125 | 31.3 | 79 (18) | 70 (17) | 60 (5.9) |
| Estriol | 2000 | 500 | 125 | 54 (0.43) | 76 (14) | 74 (12) |
| 5 α -Dihydroprogesterone | 2000 | 500 | 125 | 50 (4) | 46 (4.7) | 43 (1.9) |
| Allopregnanolone | 2000 | 125 | 7.81 | 56 (3.8) | 49 (1.9) | 50 (2.1) |
| Isopregnanolone | 2000 | 125 | 7.81 | 67 (4.2) | 50 (5) | 58 (12) |
| 5 β -Dihydroprogesterone | 500 | 125 | 31.3 | 50 (0.93) | 46 (4.4) | 46 (0.61) |
| Pregnanolone | 2000 | 500 | 125 | 68 (6.3) | 63 (7.4) | 56 (3.8) |
| Epipregnanolone | 2000 | 125 | 31.3 | 53 (0.52) | 48 (4.1) | 48 (6.8) |

Supplementary Table S3., continued.

| Steroid | Added [pg] | | | Recovery (RSD) [%] | | |
|--|------------|---------|---------|--------------------|-----------|-----------|
| | level 1 | level 2 | level 3 | level 1 | level 2 | level 3 |
| 5 α ,20 α -Tetrahydroprogesterone | 2000 | 125 | 7.81 | 61 (2.4) | 61 (15) | 56 (8.3) |
| 5 α -Pregnane-3 α ,20 α -diol | 2000 | 125 | 31.3 | 66 (2.7) | 84 (13) | 80 (4.8) |
| 5 α -Pregnane-3 β ,20 α -diol | 2000 | 125 | 7.81 | 74 (4.9) | 66 (9.1) | 71 (4.5) |
| 5 β ,20 α -Tetrahydroprogesterone | 500 | 125 | 31.3 | 63 (5.3) | 55 (5) | 61 (8.4) |
| 5 β -Pregnane-3 α ,20 α -diol | 2000 | 125 | 7.81 | 75 (5.9) | 68 (5.1) | 74 (12) |
| 5 β -Pregnane-3 β ,20 α -diol | 2000 | 500 | 31.3 | 65 (5.4) | 66 (4.1) | 69 (7.9) |
| 17 α -Hydroxyallopregnanolone | 125 | 7.81 | 1.95 | 65 (8.3) | 62 (9) | 65 (4.2) |
| 17 α -Hydroxypregnanolone | 125 | 7.81 | 1.95 | 68 (9.9) | 66 (8.7) | 71 (1.6) |
| 5 α -Pregnane-3 α ,17 α ,20 α -triol | 500 | 125 | 1.95 | 57 (15) | 81 (8.1) | 74 (4.7) |
| 5 α -Pregnane-3 β ,17 α ,20 α -triol | 125 | 7.81 | 1.95 | 55 (5.6) | 62 (1.2) | 64 (11) |
| 5 β -Pregnane-3 α ,17 α ,20 α -triol | 500 | 125 | 1.95 | 54 (15) | 59 (11) | 55 (2.2) |
| 5 α -Androstane-3,17-dione | 125 | 7.81 | 1.95 | 100 (8.3) | 94 (11) | 97 (6.4) |
| Androsterone | 10000 | 125 | 1.95 | 99 (11) | 110 (6.7) | 100 (1.6) |
| Epiandrosterone | 500 | 7.81 | 1.95 | 110 (8.4) | 110 (7.6) | 120 (2.1) |
| Etiocholanolone | 500 | 125 | 1.95 | 85 (4.5) | 63 (5.9) | 75 (6.4) |
| Epietiocholanolone | 500 | 125 | 31.3 | 110 (14) | 93 (6) | 110 (8.7) |
| 5 α -Androstane-3 α ,17 β -diol | 2000 | 125 | 7.81 | 88 (5.6) | 91 (8.5) | 89 (14) |
| 5 α -Androstane-3 β ,17 β -diol | 2000 | 1.95 | 0.488 | 88 (6.8) | 77 (13) | 70 (6.2) |
| 5 β -Androstane-3 α ,17 β -diol | 125 | 31.3 | 0.488 | 110 (7.6) | 110 (8.7) | 100 (13) |
| 5 β -Androstane-3 β ,17 β -diol | 125 | 31.3 | 0.488 | 95 (8.1) | 99 (12) | 86 (7.6) |
| Cortisol | 10000 | 2000 | 500 | 98 (2.1) | 94 (7.3) | 95 (4.1) |
| Cortisone | 10000 | 2000 | 500 | 95 (8.5) | 100 (7.3) | 100 (5.6) |
| Corticosterone | 500 | 125 | 7.81 | 87 (8.1) | 81 (13) | 86 (15) |
| 21-Deoxycortisol | 31.3 | 7.81 | 1.95 | 84 (11) | 78 (5.7) | 81 (10) |
| 11-Deoxycorticosterone | 500 | 125 | 31.3 | 110 (7.2) | 90 (7.9) | 95 (0.37) |
| 3 α ,5 α -Tetrahydrocorticosterone | 500 | 125 | 1.95 | 92 (15) | 85 (6.4) | 95 (10) |
| 3 α ,5 β -Tetrahydrocorticosterone | 500 | 1.95 | 0.488 | 89 (3.6) | 110 (10) | 100 (9.1) |
| 11 β -Hydroxyandrostenedione | 2000 | 500 | 7.81 | 120 (9.3) | 120 (4.6) | 120 (7.1) |
| 11 β -Hydroxyandrosterone | 500 | 125 | 31.3 | 110 (11) | 99 (3.4) | 96 (3.5) |
| 11 β -Hydroxyepiandrosterone | 125 | 31.3 | 1.95 | 110 (9.3) | 110 (6.7) | 91 (8.4) |
| 11 β -Hydroxyetiocholanolone | 125 | 31.3 | 1.95 | 110 (6.4) | 110 (11) | 110 (12) |