Supplemental Table 1

Adrenal Enzyme *Product/Precursor*	Cortisol Treatment -	 +	Fold Change
17α Hydroxylase			
17αOHPreg/Preg	1.7± 0.1	4.2 ± 0.2	**2.5** ⬆
17αOHProg/Prog	2.2 ± 0.1	1.5 ± 0.1	**1.5** ⬇
17, 20 Lyase			
DHEA/17αOHPreg	0.4 ± 0.1	0.5 ± 0.01	**1.3** ⬆
A'dione/17αOHProg	0.6 ± 0.01	1.1 ± 0.01	**1.8** ⬆
3βHSD2			
Prog/Preg	3.8 ± 0.6	1.5 ± 0.2	**2.5** ⬇
17αOHProg/17αOHPreg	4.8 ± 0.7	0.6 ± 0.01	**8.0** ⬇
A'dione/DHEA	8.0 ± 1.9	1.2 ± 0.01	**6.7** ⬇

Adrenal Enzyme *Product/Precursor*	Cortisol Treatment -	 +	Fold change
3βHSD2			
A'dione/DHEA	2.2 ± 0.4	0.3 ±0.01	**7.3** ⬇

Supplemental Table 1. **Effect of cortisol upon adrenal steroidogenic enzyme activities in human adrenal cells.** For each enzyme, the product/precursor ratio, as well as the change in the ratio is shown in the absence and presence of cortisol treatment of NCI-H295R cells. Upper and lower panels display metabolites of [^{3}H]-pregnenolone and [^{3}H]-DHEA, respectively.

Supplemental Table 2

Adrenal Enzyme *Product/Precursor*	Cortisol Treatment (μM) 0	 5	 50	 100	Fold Change (0 *vs.* 100 μM)
17α Hydroxylase *17αOHPreg/Preg*	2.7 ± 0.2	2.8 ± 0.1	2.9 ± 0.04	3.0 ± 0.1	**1.1** ⬆
17, 20 Lyase *DHEA/17αOHPreg*	2.7 ± 0.2	2.3 ± 0.1	2.2 ± 0.04	2.0 ± 0.1	**1.4** ⬇

Supplemental Table 2. **Effect of cortisol upon adrenal steroidogenic enzyme activities in non-adrenal cells engineered to express *CYP17A1***. COS-7 cells were transfected with *CYP17A1* and treated with [^{3}H]-pregnenolone in the absence and presence of different concentrations of cortsiol. The product/precursor ratio as well as the change in this ratio at cortisol concentrations of 0 *vs.* 100 μM, are shown for each enzyme.