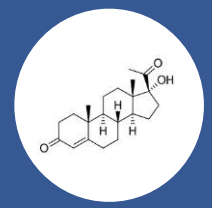


# SALIVARY 17 $\alpha$ -HYDROXYPROGESTERONE

## QUICK START GUIDE



### BIOLOGICAL CONSIDERATIONS

17 $\alpha$ -hydroxyprogesterone (17-OH progesterone or 17OHP) is a steroid hormone produced in the adrenal gland and gonads. It is synthesized from progesterone and serves primarily as a precursor compound that is converted into cortisol in the adrenal gland or into androgenic and estrogenic steroid hormones in the gonads. When measured in blood, 17-OHP is routinely used for the diagnostic assessment of 21-hydroxylase deficiency, which is linked to congenital adrenal hyperplasia, impaired aldosterone synthesis, and fatal salt-wasting. 17-OHP enters saliva from blood via intracellular mechanisms, and there is a modest correlation between saliva and serum values.

<b>Biological Representation</b>	Systemic
<b>Serum-Saliva Correlation</b>	0.64

### SAMPLE TIMING AND DESIGN

17-OHP exhibits a diurnal rhythm with higher values in the morning, decreasing over the day to a nadir in the evening.

### FREQUENTLY STUDIED WITH

Cortisol, Estradiol, Progesterone, DHEA, Androstenedione

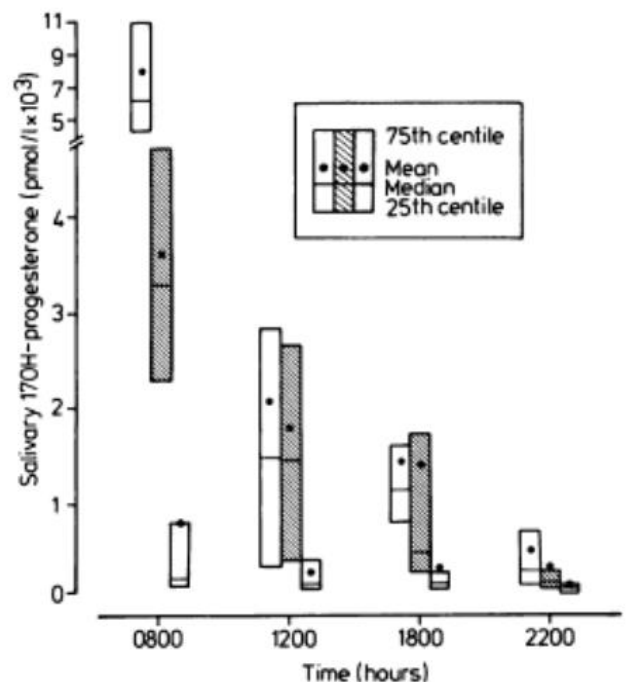
### TECHNICAL SUMMARY

Sample Collection Methods & Volumes	
Passive Drool	✓
SalivaBio Swabs	✓
Optimum Collection Volume	75 $\mu$ L*

\*Add 300  $\mu$ L to the total collection volume for all analytes of interest.

### EXAMPLE DATA

Young M C, et al., (1988) measured salivary 17-OHP in 20 patients with adrenal hyperplasia. The graph illustrates the circadian rhythm of 17-OHP throughout the day with morning peak levels, sampling times, and testosterone ranges.



Young, M C, et al. (1988)

### KEY RESOURCES

- Granger, DA, Taylor, MK. (2020). Salivary Bioscience: Foundations of Interdisciplinary Saliva Research and Applications. Springer. <https://springer.com/book/10.1007/978-3-030-35784-9>
- Gröschl, M., Rauh, M., Dörr, H.-G. (2003). Circadian rhythm of salivary cortisol, 17 $\alpha$ -hydroxyprogesterone, and progesterone in healthy children. Clin Chem, 49(10), 1688-91.
- Vining, R.F., McGinley, R.A. (1987). The measurement of hormones in saliva: Possibilities and pitfalls. J Ster Biochem, 27(1-3), 81-94.
- Young, M. C., et al., (1988). 17OH-progesterone rhythms in congenital adrenal hyperplasia. Archives of disease in childhood, 63(6), 617-623.

