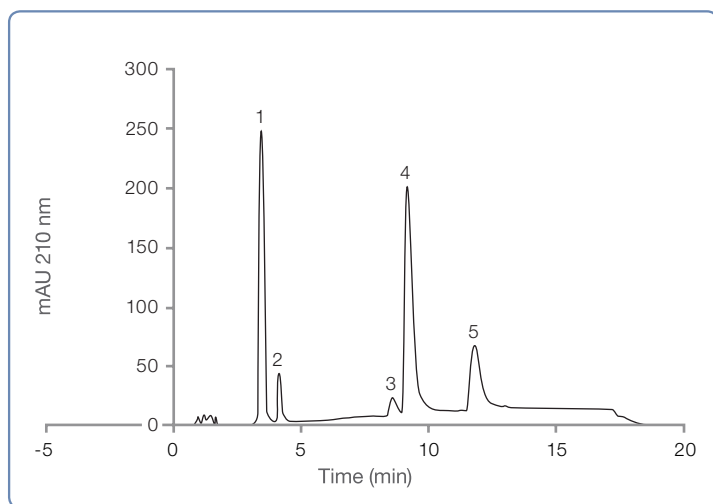


Separation of Five Steroids

Hamilton PRP™-C18 Reversed Phase HPLC Column

Steroids represent a chemically distinct class of hormones with wide-ranging biological functions. Synthetic derivatives of endogenous steroid prototypes are used medically in birth control and in the treatment of asthma, arthritis, inflammation and osteoporosis.

Steroids share a characteristic, polycyclic structure and have varying degrees of lipophilicity (log P). In this study, a reversed phase HPLC method was developed for separation of five steroid hormones with partition coefficients ranging from 1.47 (cortisone) to 4.5 (pregnenolone) on a Hamilton PRP-C18 HPLC column.



Column:	PRP-C18, 5 µm, 4.6 x 150 mm
Part Number:	79676
Mobile Phase A:	20/80 Acetonitrile/Water
Mobile Phase B:	90/10 Acetonitrile/Water
Flow Rate:	1.0 mL/min
Gradient:	20 to 95% B in 20 minutes
Temperature:	Ambient
Injection Volume:	1.0 µL
Sample Concentration:	0.1 mg/mL
Detection:	UV at 210 nm

Compounds	Lipophilicity
1. Estriol	(log P = 2.5)
2. Cortisone	(log P = 1.5)
3. Testosterone	(log P = 3.3)
4. Estrone	(log P = 3.1)
5. Pregnenolone	(log P = 4.5)

For more information on Hamilton HPLC columns and accessories or to order a product, please visit www.hamiltoncompany.com or call (800) 648-5950 in the US or +41-81-660-60-60 in Europe.

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