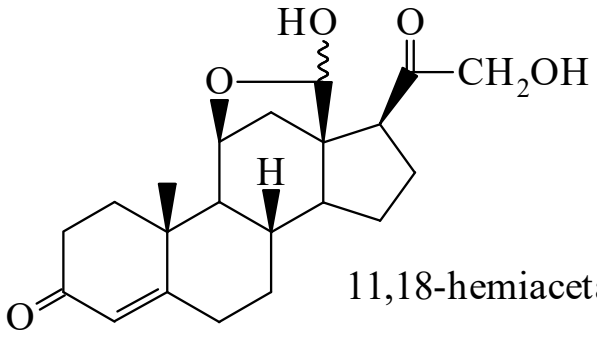
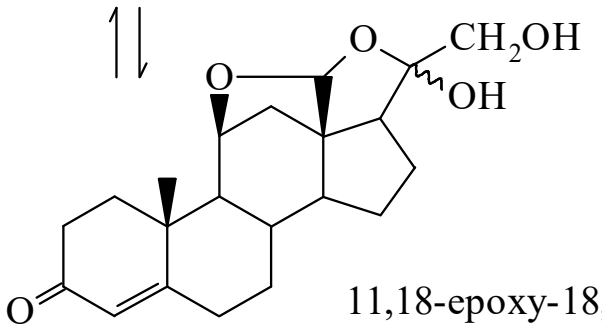
>>**Entry Name: Aldosterone,** BAN, INN

Synonym(s): 11β,21-Dihydroxy-3,20-dioxopregn-4-en-18-al. 11β,21-Dihydroxypregn-4-ene-3,18,20-trione. Aldocorten. Electrocortin. Oxocorticosterone. Reichstein's substance X



11,18-hemiacetal-20-oxo-*form*



11,18-epoxy-18,20-hemiacetal-*form*

CAS Registry Number: 52-39-1

Molecular Formula: $C_{21}H_{28}O_5$
Molecular Weight: 360.449
Accurate Mass: 360.193675
Percentage Composition: C 69.98%; H 7.83%; O 22.19%
General Statement: Occurs in soln. as equilibrium mixture of the two hemiacetal forms illustrated. Both forms are mixtures of epimers (C-18 and C-20) with the less hindered predominating in each case (18*S* and 20*S* respectively)
Biological Source: Adrenal hormone highly active in control of mineral metabolism
Use/Importance: Used in association with a glucocorticoid in treatment of adrenocortical insufficiency
Physical Description: Cryst. (AcOH)
Melting Point: Mp 164-169°
Optical Rotation: $[\alpha]_D^{25}$+161 ($CHCl_3$)
Hazard & Toxicity: Adverse effects reported when used therapeutically

Aldrich: 23436-2
Fluka: 5521
Sigma: A6628

>>**Derivative:** 21-Ac

Molecular Formula: $C_{23}H_{30}O_6$
Molecular Weight: 402.486
Accurate Mass: 402.20424
Percentage Composition: C 68.64%; H 7.51%; O 23.85%
Melting Point: Mp 198°
Optical Rotation: $[\alpha]_D$ +122.7 ($CHCl_3$)

>>**Derivative:** 18,21-Di-Ac

Molecular Formula: $C_{25}H_{32}O_7$
Molecular Weight: 444.524
Accurate Mass: 444.214805
Percentage Composition: C 67.55%; H 7.26%; O 25.19%
Melting Point: Mp 72-74°

>>**Derivative:** 17-Epimer
see 17-Isoaldosterone, HJW91-P

References: