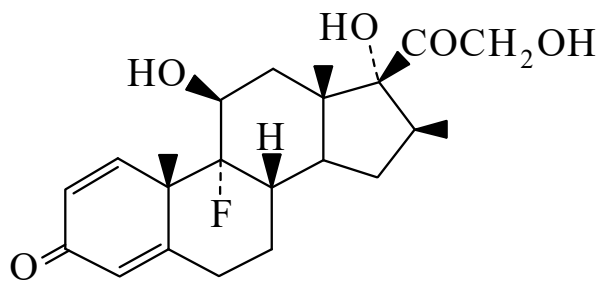




>>Entry Name: **Betamethasone**, BAN, INN, JAN, USAN

Synonym(s): 9-Fluoro-11,17,21-trihydroxy-16-methylpregna-1,4-diene-3,20-dione, 9Cl. Betadexamethasone. Betametasone. **Rinderon**†. Vancenase. NSC 39470. Many other names



CAS Registry Number: 378-44-9

Molecular Formula: C₂₂H₂₉FO₅

Molecular Weight: 392.466

Accurate Mass: 392.199903

Percentage Composition: C 67.33%; H 7.45%; F 4.84%; O 20.38%

General Statement: For 16 α -epimer see Dexamethasone [BZQ30-M](#)

Biological Use/Importance: Widely used corticosteroid; freq. used as esters

Physical Description: Cryst. (EtOAc)

Development Status: Approved 1987

Melting Point: Mp 231-234 dec.°

Optical Rotation: [α]_D +108 (Me₂CO)

Calculated Log P Data: Log P 1.49 (uncertain value) (calc)

Other Data: Stereochem. is (9 α ,11 β ,16 β ,17 α OH)

Aldrich: 28525-0

Sigma: B7005

>>Derivative: 17-Ac

CAS Registry Number: 5534-12-3

Molecular Formula: C₂₄H₃₁FO₆

Molecular Weight: 434.504

Accurate Mass: 434.210468

Percentage Composition: C 66.34%; H 7.19%; F 4.37%; O 22.09%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 238-240°

>>Derivative: 21-Ac

Synonym(s): **Betamethasone acetate**, JAN, USAN. Betafluorene

CAS Registry Number: 987-24-6

Molecular Formula: C₂₄H₃₁FO₆

Molecular Weight: 434.504

Accurate Mass: 434.210468

Percentage Composition: C 66.34%; H 7.19%; F 4.37%; O 22.09%

Physical Description: Prisms (Me₂CO/Et₂O)

Melting Point: Mp 205-208° (196-201°)

Optical Rotation: [α]_D +140 (CHCl₃)

Calculated Log P Data: Log P 2.02 (uncertain value) (calc)

>>Derivative: 17,21-Di-Ac

CAS Registry Number: 5514-77-2

Molecular Formula: C₂₆H₃₃FO₇

Molecular Weight: 476.541

Accurate Mass: 476.221033

Percentage Composition: C 65.53%; H 6.98%; F 3.99%; O 23.50%

Melting Point: Mp 155°