

脳内ステロイド(ニューロステロイド, **neurosteroid**) は100種以上あると推測できる

← 過去の川戸研の研究や世界の文献をもとに推測すると

以下に脳内に存在すると思われるステロイドを列挙する。黄色に塗ったものは脳の海馬で特に重要な機能を持っており、研究が進んでいる。

(Cholesterol の6種の誘導体は書いてない)

1. [Aldosterone](#)
2. [Androstenedione](#)
3. [5 \$\beta\$ -Cholestane-3 \$\alpha\$,7 \$\alpha\$,12 \$\alpha\$,27-tetrol](#)
4. [5 \$\beta\$ -Cholestane-3 \$\alpha\$,7 \$\alpha\$,12 \$\alpha\$ -triol](#)
5. [Cholesterol](#)
6. [Corticosterone](#)
7. [5 \$\alpha\$, 5 \$\beta\$ -Corticosterone](#)
8. [Cortisol, 5 \$\alpha\$, 5 \$\beta\$ -Cortisol](#)
9. [Cortisol](#)
10. [Dehydroepiandrosterone](#) (DHEA)
11. [11-Deoxycorticosterone](#) (DOC)
12. [11-Deoxycortisol](#)
13. [21-Deoxycortisol](#) (11 β ,17 α ,-Dihydroxypregn-4-ene-3,20-dione)
14. [22,23-Dihydroergosterol](#) (Ergosta-5,7-dien-3 β -ol)
15. [Dihydrotestosterone](#) (DHT, 5 α -DHT)
16. [18,19-Dihydroxydeoxycorticosterone](#) (18,19,21-Trihydroxypregn-4-ene-3,20-dione)
17. [7 \$\alpha\$,14 \$\alpha\$ -Dihydroxyprogesterone](#) (7 α ,14 α -Dihydroxypregn-4-ene-3,20-dione)
18. [11 \$\beta\$,14 \$\alpha\$ -Dihydroxyprogesterone](#) (11 β ,14 α -Dihydroxypregn-4-ene-3,20-dione)
19. [1 \$\alpha\$,25-Dihydroxyvitamin D₃](#) (Calcitriol; 1 α ,25-Dihydroxycholecalciferol)
20. [24,25-Dihydroxyvitamin D₃](#) (24,25-Dihydroxycholecalciferol)
21. [4,4'-Dimethylcholestatrienol](#) (4,4'-Dimethylcholesta-8,14,24-trien-3 β -ol)
22. [Ecdysone](#) (α -Ecdysone; (22R)-2 β ,3 β ,14 α ,22,25-Pentahydroxycholest-7-en-6-one)
23. [Ergosterol](#) ([22E]-Ergosta-5,7,22-trien-3 β -ol)
24. [Estradiol](#) (Estradiol-17 β ; Estra-1,3,5[10]-triene-3,17 β -diol; Oestradiol; Oestradiol-17 β)
25. [Estrone](#) (3 β -Hydroxyestra-1,3,5[10]-triene-17-one)
26. [6 \$\beta\$ -Hydroxyandrostenedione](#) (6 β -Hydroxyandrost-4-ene-3,17-dione)
27. [11 \$\beta\$ -Hydroxyandrostenedione](#) (11 β -Hydroxyandrost-4-ene-3,17-dione)
28. [15 \$\alpha\$ -Hydroxyandrostenedione](#) (15 α -Hydroxyandrost-4-ene-3,17-dione)
29. [16 \$\alpha\$ -Hydroxyandrostenedione](#) (16 α -Hydroxyandrost-4-ene-3,17-dione)
30. [16 \$\beta\$ -Hydroxyandrostenedione](#) (16 β -Hydroxyandrost-4-ene-3,17-dione)

31. [19-Hydroxyandrostenedione](#) (19-Hydroxyandrost-4-ene-3,17-dione)
32. [7 \$\alpha\$ -Hydroxycholesterol](#) (Cholest-5-ene-3 β ,7 α -diol)
33. [18-Hydroxycorticosterone](#) (11 β ,18,21-Trihydroxypregn-4-ene-3,20-dione)
34. [18-Hydroxycortisol](#) (11 β ,17 α ,18,21-Tetrahydroxypregn-4-ene-3,20-dione)
35. [18-Hydroxydeoxycorticosterone](#) (18,21-Dihydroxypregn-4-ene-3,20-dione)
36. [19-Hydroxydeoxycorticosterone](#) (19,21-Dihydroxypregn-4-ene-3,20-dione)
37. [20-Hydroxyecdysone](#) (β -Ecdysone; Ecdysterone; 2 β ,3 β ,14 α ,20 β ,22,25-Hexahydroxycholest-7-en-6-one; Insect moulting hormone; Polypodine A)
38. [2-Hydroxyestradiol](#) (Estra-1,3,5[10]-triene-2,3,17 β -triol)
39. [4-Hydroxyestradiol](#) (Estra-1,3,5[10]-triene-4,3,17 β -triol)
40. [6 \$\beta\$ -Hydroxylithocholic acid](#) (3 α ,6 β -Dihydroxy-5 β -cholan-24-oic acid)
41. [7 \$\beta\$ -Hydroxypregnenolone](#) (3 β ,7 β -Dihydroxypregn-5-en-20-on)
42. [17 \$\alpha\$ -Hydroxypregnenolone](#) (3 β ,17 α -Dihydroxypregn-5-en-20-on)
43. [6 \$\beta\$ -Hydroxyprogesterone](#) (6 β -Hydroxypregn-4-ene-3,20-dione)
44. [11 \$\beta\$ -Hydroxyprogesterone](#) (11 β -Hydroxypregn-4-ene-3,20-dione)
45. [14 \$\alpha\$ -Hydroxyprogesterone](#) (14 α -Hydroxypregn-4-ene-3,20-dione)
46. [16 \$\alpha\$ -Hydroxyprogesterone](#) (16 α -Hydroxypregn-4-ene-3,20-dione)
47. [17 \$\alpha\$ -Hydroxyprogesterone](#) (17 α -Hydroxypregn-4-ene-3,20-dione)
48. [2 \$\beta\$ -Hydroxytestosterone](#) (2 β ,17 β -Dihydroxyandrost-4-en-3-one)
49. [6 \$\beta\$ -Hydroxytestosterone](#) (6 β ,17 β -Dihydroxyandrost-4-en-3-one)
50. [7 \$\alpha\$ -Hydroxytestosterone](#) (7 α ,17 β -Dihydroxyandrost-4-en-3-one)
51. [11 \$\alpha\$ -Hydroxytestosterone](#) (11 α ,17 β -Dihydroxyandrost-4-en-3-one)
52. [11 \$\beta\$ -Hydroxytestosterone](#) (11 β ,17 β -Dihydroxyandrost-4-en-3-one)
53. [15 \$\alpha\$ -Hydroxytestosterone](#) (15 α ,17 β -Dihydroxyandrost-4-en-3-one)
54. [16 \$\alpha\$ -Hydroxytestosterone](#) (16 α ,17 β -Dihydroxyandrost-4-en-3-one)
55. [16 \$\beta\$ -Hydroxytestosterone](#) (16 β ,17 β -Dihydroxyandrost-4-en-3-one)
56. [25-Hydroxyvitamin D₃](#) (Calcidiol; 25-Hydroxycholecalciferol)
57. [Lanosterol](#) (Kryptosterol; Lanosta-8,24-dien-3 β -ol)
58. [Lithocholic acid](#) (3 α -Hydroxy-5 β -cholan-24-oic acid)
59. [19-Oic-deoxycorticosterone](#) (21-Hydroxy-3,20-dioxopregn-4-en-19-oic acid)
60. [18-Oxocortisol](#) (11 β ,17,21-Trihydroxypregn-4-ene-3,18,20-trione)
61. [19-Oxo-deoxycorticosterone](#) (21-Hydroxy-19-oxopregn-4-ene-3,20-dione)
62. [Pregnenolone](#) (3 β -Hydroxypregn-5-en-20-one)
63. [Progesterone](#) (Pregn-4-ene-3,20-dione)
64. [Testosterone](#) (17 β -Hydroxyandrost-4-en-3-one)
65. [3 \$\alpha\$,7 \$\alpha\$,12 \$\alpha\$ -Trihydroxy-5 \$\beta\$ -cholestan-27-oic acid](#)
66. [1 \$\alpha\$,24,25-Trihydroxyvitamin D₃](#) (Calcitriol; 1 α ,24,25-Trihydroxycholecalciferol)

67. Vitamin D₃ (Activated 7-dehydrocholesterol; Calcitriol; Cholecalciferol)