

Intermediate

No.	Intermediates	CAS No.	Formula	Product	Step
1	Morphinone dicarbamate		C ₂₂ H ₂₃ NO ₇	Naltrexone. HCl Naloxone. HCl Oxymorphone. HCl Oxycodone. HCl	N-6 N-6 N-6 N-7
2	14-Hydroxy morphinone dicarbamate		C ₂₂ H ₂₃ NO ₈	Naltrexone. HCl Naloxone. HCl Oxymorphone. HCl Oxycodone. HCl	N-4 N-4 N-5
3	14-Hydroxy dihydro morphinone dicarbamate		C ₂₂ H ₂₅ NO ₈	Naltrexone. HCl Naloxone. HCl Oxymorphone. HCl Oxycodone. HCl	N-3 N-3 N-3 N-4
4	Naltrexone base	16590-41-3	$C_{20}H_{23}NO_4$	Naltrexone. HCl	N-1
5	Naloxone base	465-65-6	$C_{19}H_{21}NO_4$	Naloxone. HCl	N-1
6	Oxymorphone	76-41-5	C ₁₇ H ₁₉ NO ₄	Oxymorphone. HCl	N-1
7	Oxycodone	76-42-6	$C_{18}H_{21}NO_4$	Oxycodone. HCl	N-1
8	Codeinone	467-13-0	$C_{18}H_{19}NO_3$	Oxycodone. HCl	N-5
9	14-Hydroxy codeinone		C ₁₈ H ₁₉ NO ₄	Oxycodone. HCl	N-2
10	Thevinone	15358-22-2	$\mathrm{C}_{23}\mathrm{H}_{27}\mathrm{NO}_4$	Buprenorphine. HCl	N-7
11	Dihydro Thevinone	16196-82-0	C ₂₃ H ₂₉ NO ₄	Buprenorphine. HCl	N-6
12	Thevinol		C ₂₇ H ₃₉ NO ₄	Buprenorphine. HCl	N-5
13	3-O-methyl norbuprenorphine		C ₂₆ H ₃₇ NO ₄	Buprenorphine. HCl	N-3
14	Norbuprenorphine	78715-23-8	C ₂₅ H ₃₅ NO ₄	Buprenorphine. HCl	N-2
15	Buprenorphine base	52485-79-7	$C_{29}H_{41}NO_4$	Buprenorphine. HCl	N-1
16	Dihydro codeine	125-28-0	C ₁₈ H ₂₃ NO ₃	Dihydrocodeine phosphate	N-1
17	Hydrocodone	125-29-1	$\mathrm{C}_{18}\mathrm{H}_{21}\mathrm{NO}_{4}$	Hydrocodone bitartrate	N-1
18	Noroxymorphone	33522-95-1	C16H17NO4	Naltrexone.HCl Naloxone.HCl	N-2 N-2