

THC Analogues: What are *Isomers vs Derivatives*?

LANGUAGE IN HB2294: "Tetrahydrocannabinol" or "THC" means any naturally occurring or synthetic tetrahydrocannabinol, including its salts, isomers, and derivatives or salts of the isomers and derivatives.

ISOMER: Same number of carbons, hydrogens, and oxygens, just re-arranged. *Same molecule, different arrangement.*

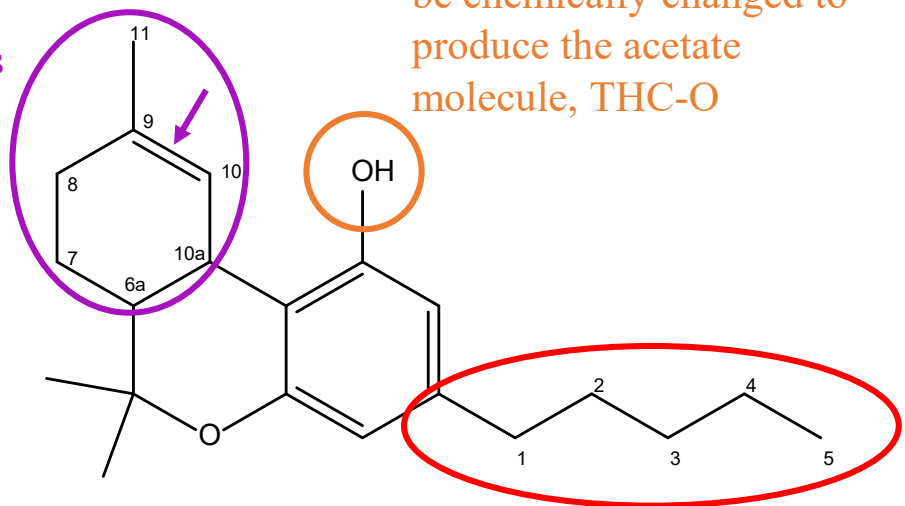
For example: Delta-8 vs Delta-9 vs Delta-10

DERIVATIVE: Similar core structure. Looks like Delta-9 THC, but has added and/or subtracted carbons, hydrogens, and oxygens. *Different molecule, similar core.*

For example: THC-O or For example: THC-P

Location of the double bond gives the number between delta (Δ) and tetrahydrocannabinol (THC). As shown, this molecule is Δ 9-THC

This functional group can be chemically changed to produce the acetate molecule, THC-O



Any combination of these changes are possible, making molecules that look like THC with unknown effects and safety. Conservatively, 100s to 1000s of potential compounds can be formed.

The number of "zigzags" (number of carbons) in the side chain can be altered to make different molecules.

4 = tetrahydrocannabibutol (THCB)

5 = THC

6 = tetrahydrocannabihexol (THCH)

7 = tetrahydrocannabiphorol (THCP)

8 = tetrahydrocannabioctol (THCjd)



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