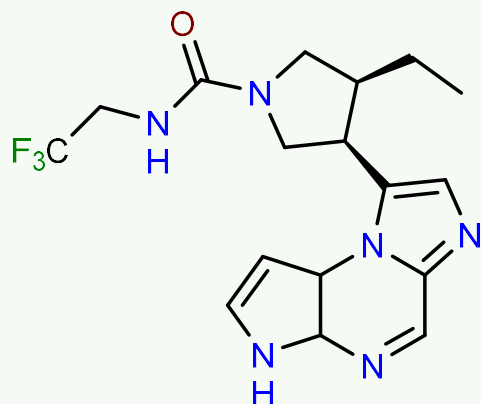


Upadactinib



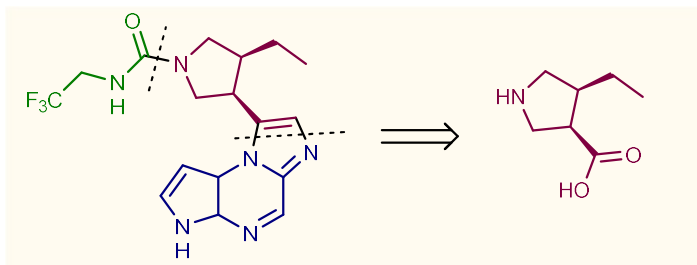
Properties:

- JAKs: Just Another Kinase, later renamed Janus Kinases.
 - Family of cellular signal transducers.
 - Involved mostly in inflammatory behaviors.
-
- Upadactinib is a selective JAK-1 inhibitor that possesses high selectivity
 - This reduces side effects associated with inhibition of other JAKs.
 - As a result, it can effectively downregulate the production of a wide array of inflammatory mediators.

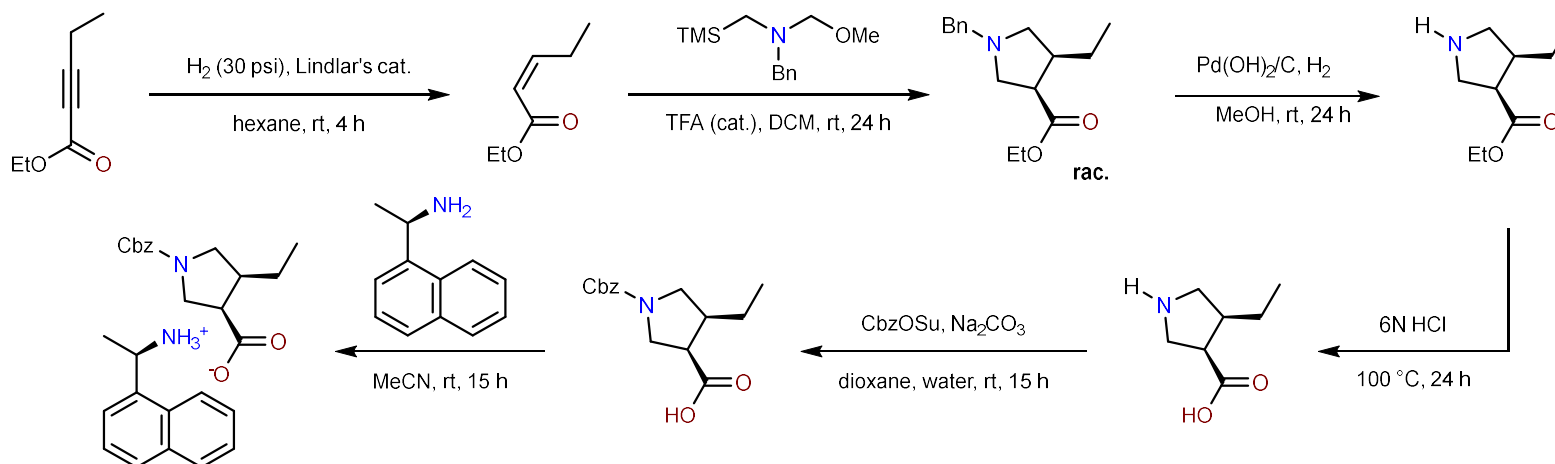


Commercial route:

- Patent by AbbVie.
- They build the molecule starting from a pyrrolidine scaffold.



abbvie



- The synthesis of the pyrrolidine moiety relies on a [3+2] cycloaddition which affords a *cis* relationship between the two substituents.
- Enantiopurity is achieved through a classic resolution of the carboxylic acid.

