An Ene-reaction Ene-ables an α-Kainic Acid Synthesis

**Significance:** α-Kainic acid is isolated from the algae *Digenea simplex* and *Centrocerus clavulatum*. It is a central nervous system stimulant that acts via kainate receptor agonism and is used in epilepsy research to induce seizures in animals. The authors synthesized α-kainic acid in 5% overall yield and succeeded in verifying the absolute stereochemistry.

**Comment:** Starting from (S)-(+)5-ethyl glutamate, a borane reduction chemoselectively affords a primary alcohol. This alcohol was protected as the TBS ether and the secondary amide was alkylated with A. Selenoxide elimination set the stage for the key diastereoselective intramolecular ene reaction, which yielded a single isomer. Silyl ether deprotection and oxidation via Jones’ reagent unveiled the carboxylic acid. Finally, saponification and deprotection afford (−)-α-kainic acid.