**Synthesis of Molibresib**

**Significance:** Molibresib (GSK525762) is an inhibitor of the interaction between bromo and extraterminal (BET) bromodomain proteins that is of interest for the treatment of solid tumors. The concise synthesis of molibresib depicted started with the commercially available ketone \(A\) and delivered 52 kg of product in 41% yield and 99.9% ee. For the discovery synthesis of molibresib, see: E. Nicodeme et al. *Nature* 2010, 468, 1119.

**Comment:** Construction of the core methyltriazolo-[1,4]benzodiazepine \(H\) was achieved by oxidative activation of the thiolactam \(F\) via a sulfenic acid \((RS–OH)\) that underwent substitution by acetylhydrazide \((G)\), followed by an acid-catalyzed cyclocondensation. The mild conditions for the methyltriazole formation avoided racemization of the sensitive stereocenter.