

6-step synthesis of TM-001:

1. Grignard addition or alkyl lithiation to ethylene oxide.
2. TMS-protection of hydroxyl group.
3. Acetal hydrolysis to aldehyde.
4. Organocatalyzed oxidation (aldehyde \rightarrow carboxylic acid).
5. Carboxylic acid \rightarrow acyl chloride.
6. Amide coupling.

