

Jiangpeng Liu  
Liu Research Group  
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### Introduction:

Cyclobutastellettolide B was originally isolated from a *Stelletta* sp. sponge (3.0 mg/1.3 kg) by Stonik et al. in 2019.

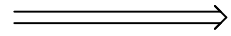
It could significantly increase the reactive oxygen species level in murine peritoneal macrophages and be a potential lead for the development of immunomodulatory agents.

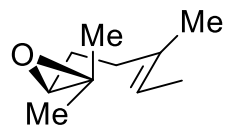
It has an unusual 6/6/4-fused tricyclic core with six stereocenters.

Among them, three are contiguous quaternary stereocenters.

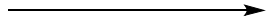
The first enantioselective total synthesis of (+)-cyclobutastellettolide B in 13 steps with a total yield of 31.5%.

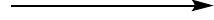
# Retro-synthetic route

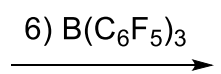




4)







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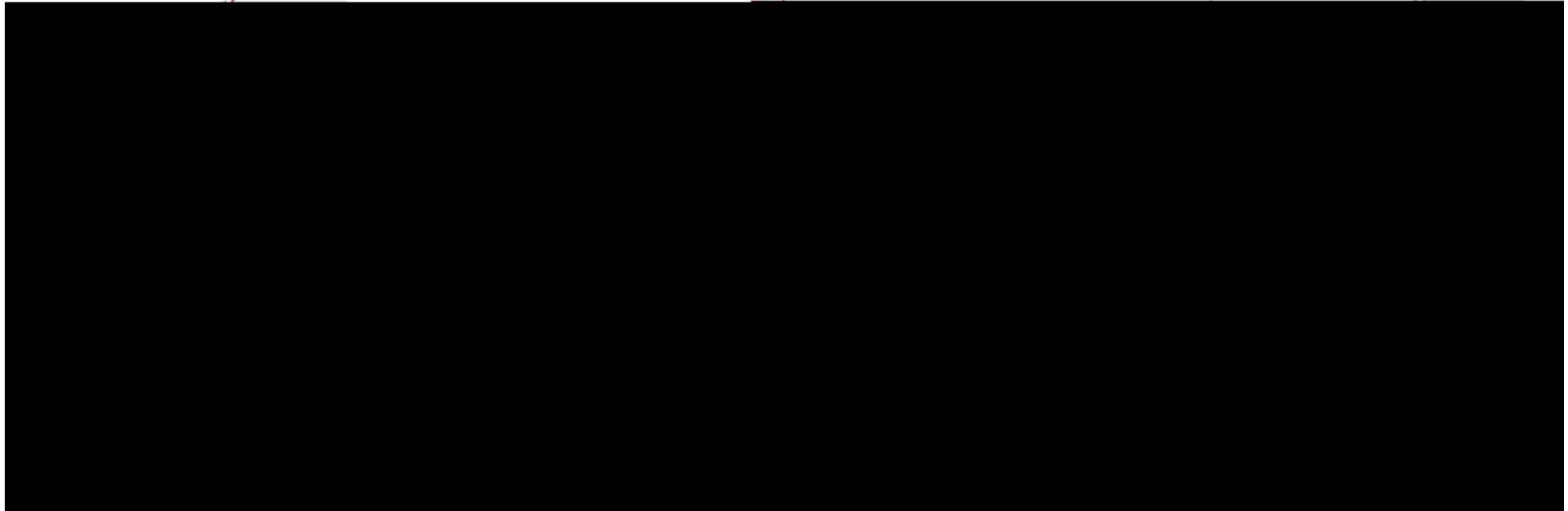
Lewis acid











Thanks for your attention

