

# **Synthesis and anti-inflammation evaluation of new C(60) fulleropyrrolidines bearing biologically active xanthine**

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摘要

## **Abstract**

We designed and prepared the new C60 fullerene hybrids bearing a xanthine moiety as potential double-action anti-inflammatory agents, capable of simultaneous inhibition of LPS-induced NO and TNF- $\alpha$  production. The 10  $\mu\text{M}$  of fulleropyrrolidine-xanthine dyad 2a and b were effective in suppressing LPS-induced NO production by 55.1 $\pm$ 2.1% and 58.6 $\pm$ 2.6%, respectively, but only 2b was also effectively in suppressing LPS-induced TNF- $\alpha$  production by 34.0 $\pm$ 2.7%. We believed that the agents synthesized herein would hold promise for future development of a new generation of potent anti-inflammatory agents.