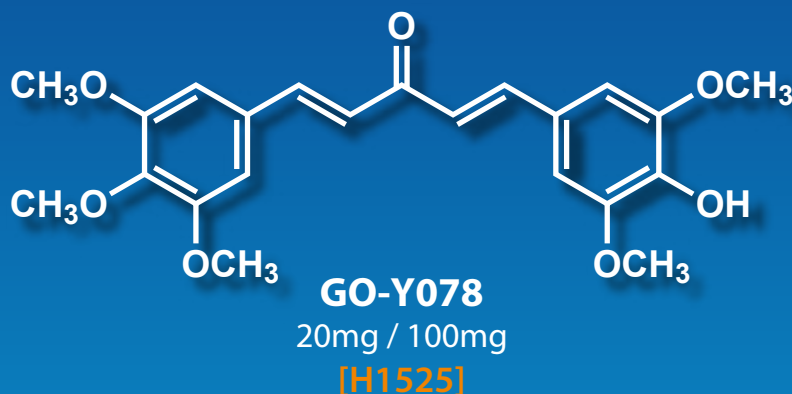


Curcumin Analogue with Enhanced Antitumor Activities



Advantages

- Enhanced Antitumor Activities
- Strong Multi-Target Inhibitory Activities
- Increased Bioavailability
- Improved Water Solubility

Curcumin, a dietary constituent of turmeric, has chemopreventive and chemotherapeutic potentials against various types of cancers, but low bioavailability prevents its use in chemotherapeutic applications. GO-Y078 [H1525] is a synthetic analog of curcumin, developed by Shibata, Iwabuchi *et al.* to increase its potential and circumvent its low bioavailability.

GO-Y078 suppresses the growth of myeloma cells, and are 7 to 12 times more effective than curcumin.¹⁾ GO-Y078 is also 6- to 15-fold stronger multi-target inhibitors of NF-κB, PI3K/AKT, JAK/STAT3 and IRF4 pathways than curcumin.¹⁾ GO-Y078 also potently inhibits interleukin 6 (IL-6) production 14-fold more than curcumin,¹⁾ and inhibits tumor angiogenesis through actin disorganization.²⁾ In addition, GO-Y078 has the additional characteristics of improved water solubility (GO-Y078: 1.07 mg/L, curcumin: 0.54 mg/L) and effectiveness in a mouse model of gastric cancer.³⁾ Furthermore, the structure activity relationships of GO-Y078 have been reported.⁴⁾

References

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