

## Germacrone PRODUCT DATA SHEET

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Product Name: Germacrone

Product Number: G061

CAS Number: 6902-91-6 Molecular Formula:  $C_{15}H_{22}O$ 

Molecular Weight: 218.33

**Description:** Germacrone is extracted from the essential oil of *Rhizoma Curcuma*, and is

known for its anticancer and antiviral activity. The activity of germacrone

against cancer has been found by different researchers to inhibit angiogenesis, metastasis, cell proliferation, and in some cases induce apoptosis. Germacrone has showed protective properties against influenza

infection, and to inhibit replication in other viruses.

Mechanism of Action: Germacrone's anticancer activity is thought to induce apoptosis by inhibition of

the JAK2/STAT3 signalling pathway.

The antiviral activity of germacrone has been shown to inhibit the synthesis of

viral DNA and proteins.

**References:** Liu, Y., Zheng, Q., Fang, B., Wang, W., Ma, F., Roshan, S., . . . He, G. (2013).

Germacrone induces apoptosis in human hepatoma HepG2 cells through inhibition of the JAK2/STAT3 signalling pathway. *Journal of Huazhong* 

University of Science and Technology, 33(3), 339-345. doi:10.1007/s11596-

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Chen, Y., Dong, Y., Jiao, Y., Hou, L., Shi, Y., Gu, T., ... Wang, C. (2015). In vitro antiviral activity of germacrone against porcine parvovirus. *Arch Virol Archives of Virology*, *160*(6), 1415-1420. doi:10.1007/s00705-015-2393-3

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