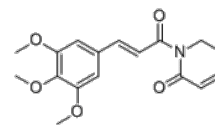


Product Name : Piperlongumine
Cat. No. : PC-70361
CAS No. : 20069-09-4
Molecular Formula : C₁₇H₁₉NO₅
Molecular Weight : 317.34
Target : STAT
Solubility : 10 mM in DMSO



Biological Activity

Piperlongumine (Piplartine) is a naturally occurring small molecule recently identified to be toxic selectively to cancer cells in vitro and in vivo, binds and targets **STAT3** Cys712 residue.

Piperlongumine elevates cellular levels of reactive oxygen species (ROS) selectively in cancer cell lines, potently inhibits the growth of spontaneously formed malignant breast tumours and their associated metastases in mice.

Piperlongumine inhibits the STAT3 signal pathway in MM cells by binding directly to the STAT3 Cys712 residue.

References

Raj L, et al. *Nature*. 2011 Jul 13;475(7355):231-4.

Adams DJ, et al. *Proc Natl Acad Sci U S A*. 2012 Sep 18;109(38):15115-20.

Yao Y, et al. *Oncotarget*. 2016 Nov 8;7(45):73497-73508.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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