



Formula: C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>

MW: 270.28

CAS: 480-37-5

TNP NUMBER: TNP00639

MDL NUMBER: MFCD00017481

IUPAC: 5-hydroxy-7-methoxy-2-phenylchroman-4-one

Smiles: c12C(CC(Oc1cc(cc2O)OC)c1ccccc1)=O

REFERENCE: Pinostrobin--an anti-leukemic flavonoid from *Polygonum lapathifolium* L. ssp. *nodosum* (Pers.) Dans. Information from Industry Assess clinically focused product information on Medscape. \* Click Here for Product Infosites -- Information from Industry. Medscape Newsletters Sign Up Sign Up To Receive Medscape Best Evidence Key journal articles ranked for newsworthiness and clinical relevance in each specialty, linked to Medline abstracts. Z Naturforsch [C]. 2006; 61(1-2):64-8 (ISSN: 0341-0382) Smolarz HD; Mendyk E; Bogucka-Kocka A; Kocki J Department of Pharmaceutical Botany, Medical University of Lublin, 1 Chodzki Str., 20-093 Lublin, Poland. smolarz@am.lublin.pl AIM OF STUDY: Search for plant compounds possessing anti-leukemic properties. RESULTS: We have shown that 5-hydroxy-7-methoxy flavanone (pinostrobin) isolated from *Polygonum lapathifolium* ssp. *nodosum* quickly penetrates through cytoplasm to the cellular nucleus of the cultured cells, and gives intensive apoptotic response in stimulating leukemic cells in vitro. The number of apoptotic cells increased with the concentration of pinostrobin: 10 nM - 25% and 60%; 100 nM - 45% and 76%; 1 microm - 70% and 88% for Jurkat and HL60 cell lines, respectively CONCLUSION: Pinostrobin may be considered as a good candidate for a leukemia

chemopreventic agent.

SOURCE: Flavanone. Pinostrobin from honey and Thai ginger (*Boesenbergia pandurata*)

ACCEPTORS: 4

DONORS: 1

ROTATION BONDS: 2

N+O: 4

Chiral Centers: 1

LogP: 2.87

LogS: -3.96

LIPINSKI: 4

