PRODUCT INFORMATION

Tephrosin (synthetic)
Item No. 19840

CAS Registry No.: 76-80-2
Formal Name: (7aR,13aR)-13,13a-dihydro-
7a-hydroxy-9,10-dimethoxy-
3,3-dimethyl-3H-bis[1]benzopyrano[3,4-b:6',5'-e]pyran-
7(7aH)-one

Synonyms: Deguelinol I, Hydroxydeguelin
MF: C_{23}H_{22}O_{7}
FW: 410.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Tephrosin (synthetic) is supplied as a solid. A stock solution may be made by dissolving the tephrosin (synthetic) in the solvent of choice. Tephrosin (synthetic) is soluble in the organic solvent chloroform, which should be purged with an inert gas.

Description

Tephrosin is a rotenoid first isolated from the leaves and seeds of *T. purpurea* and *T. vogelii* that exhibits antineoplastic and piscicidal activities. The toxic actions of this compound are attributed to its ability to inhibit the NADH:ubiquinone oxidoreductase with an IC_{50} value of 98 nM.\textsuperscript{1} Tephrosin is also reported to induce ornithine decarboxylase activity with an IC_{50} value of 147 nM.\textsuperscript{1} Tephrosin has been shown to enhance the cytotoxic activity of 2-deoxy-D-glucose (Item No. 14325) against various cancer human cancer cell lines, depleting intracellular ATP and inducing apoptosis.\textsuperscript{2}

References