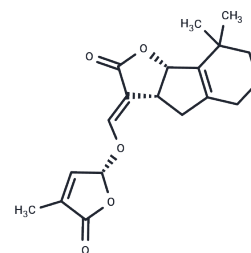


## 5-Deoxystrigol

## Chemical Properties

CAS No. :	151716-18-6
Formula:	C <sub>19</sub> H <sub>22</sub> O <sub>5</sub>
Molecular Weight:	330.37
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	5-Deoxystrigol is a highly active Striga germination stimulant. It has a protective effect on D-galactosamine (D-GalN) induced mice acute liver injury and has a protective effect on CCl <sub>4</sub> induced mice acute liver injury.
Targets(IC50)	Others
In vitro	Striga is a major biotic constraint to sorghum production in semiarid tropical Africa and Asia. Genetic resistance to this parasitic weed is the most economically feasible control measure. Mutant alleles at the LGS1 (LOW GERMINATION STIMULANT 1) locus drastically reduce Striga germination stimulant activity. METHODS AND RESULTS: We provide evidence that the responsible gene at LGS1 codes for an enzyme annotated as a sulfotransferase and show that functional loss of this gene results in a change of the dominant strigolactone (SL) in root exudates from 5-Deoxystrigol, a highly active Striga germination stimulant, to orobanchol, an SL with opposite stereochemistry. Orobanchol, although not previously reported in sorghum, functions in the multiple SL roles required for normal growth and environmental responsiveness but does not stimulate germination of Striga. CONCLUSIONS: This work describes the identification of a gene regulating Striga resistance and the underlying protective chemistry resulting from mutation.

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	3.0269 mL	15.1345 mL	30.2691 mL
5 mM	0.6054 mL	3.0269 mL	6.0538 mL
10 mM	0.3027 mL	1.5135 mL	3.0269 mL
50 mM	0.0605 mL	0.3027 mL	0.6054 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Mutation in sorghum LOW GERMINATION STIMULANT 1 alters strigolactones and causes Striga resistance. Proc Natl Acad Sci U S A. 2017 Apr 25;114(17):4471-4476.

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