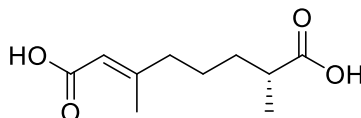


Callosobruchusic acid

Code No.: **BIA-C2359**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : (2E,7R)-3,7-Dimethyl-2-octenedioic acid, (R)-(-)-Callosobruchusic acid

Specifications

CAS #	: 87172-91-6
Molecular Formula	: C₁₀H₁₆O₄
Molecular Weight	: 200.23
Source	: Synthetic
Appearance	: Tan solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Callosobruchusic acid is the active component of a species-specific pheromone of the seed beetle and bean weevil. Both enantiomers of callosobruchusic acid are active as the copulation-release pheromone. The (2S,6R)-1 isomer is the main component of the pheromone, while the (S)-2 has an additive effect. Its analogue, 2,6-dimethyloctane-1,8-dioic acid, shows stereospecific activity with the (2R,6S)-1 is inactive and significantly masks the pheromonal activity of (2S,6R)-1.

References

1. Contact sex pheromone components of the seed beetle, *Callosobruchus analis* (F.) Shimomura K. et al. *J Chem Ecol* 2010, 36, 955.
2. Pheromone synthesis. 54. Synthesis and biological activity of optically active forms of (E)-3,7-dimethyl-2-octene-1,8-dioic acid (callosobruchusic acid). A component of the copulation release pheromone (erectin) of the azuki bean weevil. Mori K. et al. *Tetrahedron* 1983, 39, 2303.