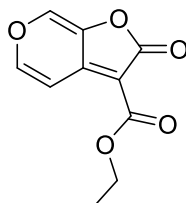


## Karrikinolide 3-ethyl ester

Code No.: **BIA-K1981**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms :

### Specifications

CAS #	:	<b>1030604-40-0</b>
Molecular Formula	:	<b>C<sub>10</sub>H<sub>8</sub>O<sub>5</sub></b>
Molecular Weight	:	<b>208.2</b>
Source	:	<b>Synthetic</b>
Appearance	:	<b>White solid</b>
Purity	:	<b>&gt;95% by HPLC</b>
Long Term Storage	:	<b>-20°C</b>
Solubility	:	<b>Soluble in methanol or DMSO</b>

### Application Notes

Karrikinolide 3-ethyl ester is a synthetic karrikinolide which acts as a key germination trigger for many species. Karrikinolide 3-ethyl ester was first published by Sun and colleagues from Dupont Corporation and is a major by-product in the synthesis of karrikin 2 (desmethylated karrikinolide). Karrikinolide enhances expression of the gibberellic acid biosynthetic genes, GA3ox1 and GA3ox2, during seed imbibition.

### References

1. Synthesis of butenolides as seed germination stimulants. Sun K. et al. Tetrahedron Lett. 2008, 49, 2922.
2. Karrikins discovered in smoke trigger Arabidopsis seed germination by a mechanism requiring gibberellic acid synthesis and light. Nelson D.C. et al. Plant Physiol. 2009, 149, 863.