# Product Data Sheet

Product Name: β-Amyrone
Cat. No.: GC66340

## Chemical Properties

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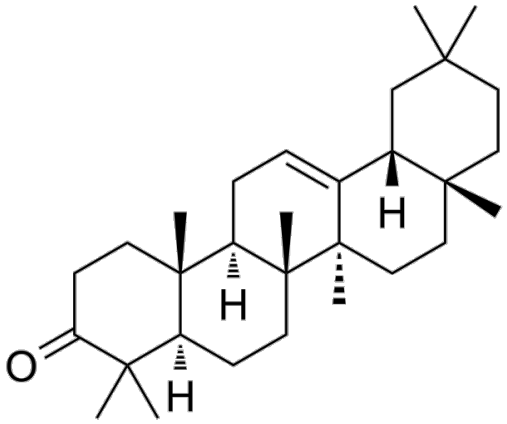
|---|---|---|---|
| Cas. No. | 638-97-1 | | |
| Formula | $C_{30}H_{48}O$ | M.Wt | 424.7 |
| Solubility | | Storage | 4°C, protect from light |
| General tips | For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |

Structure




## Background

β-Amyrone (β-Amyron) is a triterpene compound which has anti-inflammatory activity through inhibiting the expression of **COX-2**. β-Amyrone has antifungal activity , as well as antiviral activity against Chikungunya virus. β-Amyrone also inhibits **α-glucosidase** and acetylcholinesterase (**AChE**) activity. β-Amyrone can be used in the research of disease like inflammation, infection, and obesity[1][2][3][4].

β-Amyrone (1.25-10 μg/mL, 24 h) inhibits on NO? production in LPS-stimulated J774 cells, with an

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$IC_{50}$ value of 4.61 μg/mL, and has no obvious effect on cell viability [1].

β-Amyrone (10 μg/mL, 24 h) inhibits IL-6, IL-10 levels, and COX-2 expression in LPS-stimulated J774 cells[1].

β-Amyrone (0-235 μM, 7days) has antiviral activity in Vero cells against Chikungunya virus (CHIKV), with $EC_{50}$ value of 86 uM[2].

β-Amyrone inhibits α-glucosidase, acetylcholinesterase (AChE) and fungal activity with $IC_{50}$ values of 25 μM, 23 μM and 8 μg/mL, respectively[4].

Western Blot Analysis[1]

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| Cell Line: | LPS (1 μg/mL)-stimulated J774 cells |
| Concentration: | 2.5, 5, 10 μg/mL |
| Incubation Time: | 24 h |
| Result: | Inhibited COX-2 expression in a concentration-dependent manner (approximately 90% reduction at 5 or 10 μg/ mL). |

β-Amyrone (local administration on ear, 0.1-0.6 mg/kg, a single dose) inhibits ear edema formation in phenol-induced edema mice[1].

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| Animal Model: | Ear phenol-induced edema in Balb C mice [1] |
| Dosage: | 0.1, 0.3, 0.6 mg/kg, a single dose |
| Administration: | Local administration (20 ??L solution) on ear |
| Result: | Inhibited ear edema formation in a dose-related manner (47% inhibition at the dose of 0.6mg/kg). |