Rottlerin

PKCδ inhibitor

Mitochondrial uncoupler that depolarizes the mitochondrial membrane potential, reduces cellular ATP levels, activates 5'-AMP-activated protein kinase (AMPK) and affects mitochondrial production of reactive oxygen species (ROS). Potent activator of multiple Ca^{2+} -sensitive K^+ channels. Blocks several kinases and non-kinase proteins *in vitro*. Has been widely-used as a selective inhibitor of protein kinase $C\delta$ (PKC δ) (IC $_{50}$ =3-6µM). Although there is extensive published documentation to support the use of rottlerin as a selective PKC δ inhibitor, there has been some controversy in the literature over this claim. Some of this controversy may arise from the fact that rottlerin is a promiscuous inhibitor and therefore may not always display the same properties as would be expected from a classical 1:1 inhibitor. However, there are studies indicate that rottlerin has no direct effect on PKC δ and that it should not be used to determine the involvement of PKC δ in biological processes. Induces autophagy by inhibition of mTORC1 signaling.

Citations: 11

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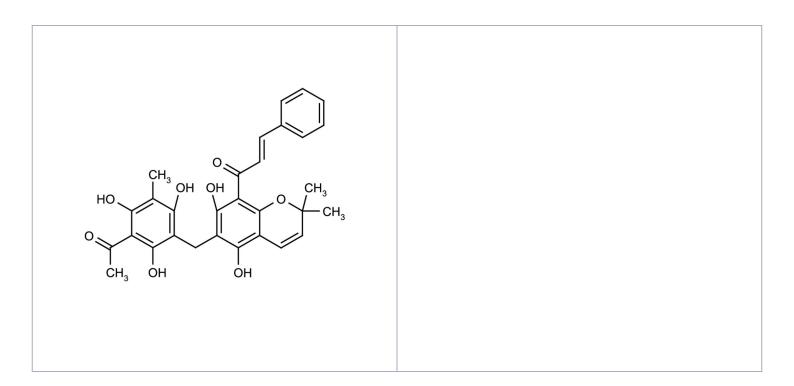
Ordering Information

Order Online »

| ALX-350-075-M010 | 10mg |
|------------------|------|
| ALX-350-075-M025 | 25mg |

Manuals, SDS & CofA

View Online »



Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended.

Long Term Storage Ambient

Shipping Ambient Temperature

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name Mallotoxin

Appearance Orange to brown solid.

CAS 82-08-6

Couple Target PKC

Couple Type Inhibitor

Formula $C_{30}H_{28}O_8$

MI 14: 8272

MW 516.5

Purity ≥98% (HPLC)

RTECS AM6913800

Soluble in DMSO (up to 50mg/ml).

Source Isolated from *Mallotus philippinensis*.

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