AbMole

Genipin Cat. No. M3327

Chemical Information



Biological Activity

Genipin is an active aglycone derived from an iridoid glycoside called geniposide, which is found in the fruit of Gardenia jasminoides Ellis. Genipin is a hydrolytic product of geniposide. Genipin has been used in traditional Chinese medicine. Genipin is used in traditional Chinese medicine to relieve the symptoms of type 2 diabetes. Genipin is an excellent natural cross-linker for proteins, collagen, gelatin, and chitosan cross-linking. Genipin has a low acute toxicity, with LD50 i.v. 382 mg/kg in mice. Therefore, much less toxic than glutaraldehyde and many other commonly used synthetic cross-linking regents. Genipin is also used for pharmaceutical purposes, such as choleretic action for liver diseases control. Furthermore, genipin can be used as a cross-linking agent for immobilized enzyme, the regulating agent for compound delivery, the raw materials for gardenia blue pigment preparation, as well as the intermediate for alkaloid synthetic etc. Genipin is a naturally occurring material that shows great potential as a use in biomaterials and also as a fingerprint reagent.

Conversion of different model animals based on BSA (Value based on data from FDA Draft Guidelines)

Species	Mouse	Rat	Rabbit	Guinea pig	Hamster	Dog
Weight (kg)	0.02	0.15	1.8	0.4	0.08	10
Body Surface Area (m ²)	0.007	0.025	0.15	0.05	0.02	0.5
K _m factor	3	6	12	8	5	20

Animal A (mg/kg) = Animal B (mg/kg) multiplied by $\frac{\text{Animal B K}_{\text{m}}}{\text{Animal A K}_{\text{m}}}$

For example, to modify the dose of resveratrol used for a mouse (22.4 mg/kg) to a dose based on the BSA for a rat, multiply 22.4 mg/kg by the Km factor for a mouse and then divide by the Km factor for a rat. This calculation results in a rat equivalent dose for resveratrol of 11.2 mg/kg.

Deal with The Products after Receiving

The packaging of the products may have turned upside down during transportation, resulting in the inhibitor adhering to the neck or cap of the vial. Take the vial out of its packaging and gently shake to let the inhibitor fall to the bottom of the vial. For liquid products, centrifuge at 200-500 RPM to gather the liquid at the bottom of the vial.