# **PRODUCT** INFORMATION



ОН

## Macranthoidin B

Item No. 31533

CAS Registry No.: Formal Name:	136849-88-2 (3β,4α)-3-[(O-β-D-glucopyranosyl- (1→4)-O-β-D-glucopyranosyl-(1→3)-O- 6-deoxy-α-L-mannopyranosyl-(1→2)- α-L-arabinopyranosyl)oxy]-23-hydroxy- olean-12-en-28-oic acid, 6-O-β-D- glucopyranosyl-β-D-glucopyranosyl ester	
Synonym:	Macranthoiside I	00
MF:	C <sub>65</sub> H <sub>106</sub> O <sub>32</sub>	`́ `OH
FW:	1,399.5	HOMO
Purity:	≥98%	он 📕 .он
Supplied as:	A crystalline solid	
Storage:	-20°C	HO
Stability:	≥4 years	
Item Origin:	Plant/Lonicera japonica	ОН
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis		

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## Laboratory Procedures

Macranthoidin B is supplied as a crystalline solid. A stock solution may be made by dissolving the macranthoidin B in the solvent of choice, which should be purged with an inert gas. Macranthoidin B is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of macranthoidin B in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of macranthoidin B can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of macranthoidin B in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Macranthoidin B is a triterpenoid saponin that has been found in Lonicerae and has anticancer activity.<sup>1</sup> It increases the production of reactive oxygen species (ROS) and induces apoptosis in HCT116 cells when used at concentrations ranging from 20 to 400  $\mu$ M.

### Reference

1. Fan, X., Rao, J., Zhang, Z., et al. Macranthoidin B modulates key metabolic pathways to enhance ROS generation and induce cytotoxicity and apoptosis in colorectal cancer. Cell Physiol. Biochem. 46(4), 1317-1330 (2018).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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