# **PRODUCT** INFORMATION



Anacardic Acid diene

Item No. 22663

CAS Registry No.:	103904-74-1	
Formal Name:	2-hydroxy-6-8Z,11Z-	
	pentadecadien-1-yl-benzoic acid	HO
Synonym:	Anacardic Acid 15:2	¥0
MF:	C <sub>22</sub> H <sub>32</sub> O <sub>3</sub>	
FW:	344.5	HO
Purity:	≥95%	
UV/Vis.:	λ <sub>max</sub> : 244, 313 nm	
Supplied as:	A neat oil	$\checkmark$ / $\checkmark$ – $\checkmark$
Storage:	-20°C	
Stability:	≥1 year	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

# Laboratory Procedures

Anacardic acid diene is supplied as a neat oil. A stock solution may be made by dissolving the anacardic acid diene in the solvent of choice. Anacardic acid diene is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of anacardic acid diene in these solvents is approximately 22, 15, and 20 mg/ml, respectively.

Anacardic acid diene is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, anacardic acid diene should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Anacardic acid diene has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

Anacardic acid diene is a polyunsaturated form of anacardic acid (Item No. 13144) that has been found in cashew nut shell liquid.<sup>1</sup> It has antibacterial activity against methicillin resistant S. aureus (MRSA) and S. mutans (MICs = 12.5 and 6.25  $\mu$ g/ml, respectively).<sup>2</sup> Anacardic acid diene has schistosomicidal activity against adult S. mansoni worms when used at a concentration of 100  $\mu$ M.<sup>1</sup> It also inhibits soybean lipoxygenase-1 in a time-dependent manner.<sup>3</sup>

# References

- 1. Alvarenga, T.A., de Oliveira, P.F., de Souza, J.M., et al. Schistosomicidal activity of alkyl-phenols from the cashew Anacardium occidentale against Schistosoma mansoni adult worms. J. Agric. Food Chem. 64(46), 8821-8827 (2016).
- 2. Kubo, I., Nihei, K., and Tsujimoto, K. Antibacterial action of anacardic acids against methicillin resistant Staphylococcus aureus (MRSA). J. Agric. Food Chem. 51(26), 7624-7628 (2003).
- 3. Ha, T.J. and Kubo, I. Lipoxygenase inhibitory activity of anacardic acids. J. Agric. Food Chem. 53(11), 4350-4354 (2005).

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

## SAFFTY 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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