# **PRODUCT** INFORMATION



## 18-carboxy dinor Leukotriene B<sub>4</sub>

Item No. 20170

CAS Registry No.:	102674-12-4		
Formal Name:	7R,14S-dihydroxy-4Z,8E,10E,12Z-		
	octadecatetraenedioic acid		
Synonym:	18-carboxy dinor $LTB_4$	OH	OH
MF:	C <sub>18</sub> H <sub>26</sub> O <sub>6</sub>		СООН
FW:	338.4		
Purity:	≥97%	СООН	
UV/Vis.:	λ <sub>max</sub> : 270 nm		
Supplied as:	A solution in ethanol		
Storage:	-20°C		
Stability:	≥1 year		
Special Conditions: Light sensitive			

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

#### Laboratory Procedures

18-carboxy dinor LTB<sub>4</sub> is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 18-carboxy dinor  $LTB_4$  in these solvents is approximately 50 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. If an organic solvent-free solution of 18-carboxy dinor LTB<sub>4</sub> is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 18-carboxy dinor LTB<sub>4</sub> in PBS, pH 7.2, is approximately 1 mg/ ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

18-carboxy dinor  $LTB_4$  is a b-oxidation metabolite of  $LTB_4$ .<sup>1</sup> In the liver,  $LTB_4$  is rapidly metabolized to 20-carboxy LTB<sub>4</sub>, which then undergoes b-oxidation to 18-carboxy dinor LTB<sub>4</sub>.<sup>2</sup>

#### References

- 1. Harper, T.W., Garrity, M.J., and Murphy, R.C. Metabolism of leukotriene B<sub>4</sub> in isolated rat hepatocytes. Identification of a novel 18-carboxy-19,20-dinor leukotriene  $B_4$  metabolite. J. Biol. Chem. 261, 5414-5418 (1986).
- 2. Shirley, M.A. and Murphy, R.C. Metabolism of leukotriene B<sub>4</sub> in isolated rat hepatocytes. Involvement of 2,4-dienoyl-coenzyme a reductase in leukotriene  $B_4$  metabolism. J. Biol. Chem. 265, 16288-16295 (1990).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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