# **PRODUCT** INFORMATION



## Icosabutate

Item No. 19386

CAS Registry No.:	1253909-57-7	
Formal Name:	2-[(5Z,8Z,11Z,14Z,17Z)-5,8,11,14,17-	
	eicosapentaen-1-yloxy]-butanoic acid	/
Synonyms:	PRB 01022, PRC 4016	
MF:	$C_{24}H_{38}O_3$	L .OH
FW:	374.6	
Purity:	≥95%	Ö
Supplied as:	A solution in ethanol	
Storage:	-20°C	
Stability:	≥2 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

#### Laboratory Procedures

Icosabutate 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 icosabutate in these solvents is approximately 100 mg/ml. Icosabutate is also miscible in ethanol.

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 icosabutate is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of icosabutate in 0.1 M Na<sub>2</sub>CO<sub>3</sub> is approximately 1.7 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Icosabutate is a synthetic  $\omega$ -3 polyunsaturated fatty acid derived from eicosapentaenoic alcohol and 2-bromo butyric acid. It was designed to resist  $\beta$ -oxidation and complex lipid incorporation and increase efficacy in fatty acid-responsive intracellular signaling systems.<sup>1,2</sup>

#### References

- 1. Bays, H.E., Hallèn, J., Vige, R., et al. Icosabutate for the treatment of very high triglycerides: A placebo-controlled, randomized, double-blind, 12-week clinical trial. J. Clin. Lipidol. 10(1), 181-191 (2016).
- 2. Kastelein, J.J.P., Hallén, J., Vige, R., et al. lcosabutate, a structurally engineered fatty acid, improves the cardiovascular risk profile in statin-treated patients with residual hypertriglyceridemia. Cardiology 135(1), 3-12 (2016).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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