# **PRODUCT** INFORMATION



## **Pregabalin Diacid Impurity**

Item No. 34150

CAS Registry No.:	5702-99-8
Formal Name:	2-(2-methylpropyl)-butanedioic acid
Synonym:	Isobutyl Succinic Acid
MF:	C <sub>8</sub> H <sub>14</sub> O <sub>4</sub>
FW:	174.2
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

#### Laboratory Procedures

Pregabalin diacid impurity is supplied as a solid. A stock solution may be made by dissolving the pregabalin diacid impurity in the solvent of choice, which should be purged with an inert gas. Pregabalin diacid impurity is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of pregabalin diacid impurity 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 pregabalin diacid impurity can be prepared by directly dissolving the solid in aqueous buffers. The solubility of pregabalin diacid impurity in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Pregabalin diacid impurity is a potential impurity found in commercial preparations of pregabalin.<sup>1</sup>

#### Reference

Yuen, P.-W. α<sub>2</sub>δ Ligands: Neurontin<sup>®</sup> (gabapentin) and Lyrica<sup>®</sup> (pregabalin). The art of drug synthesis. Johnson, D.S. and Li, J.J., editors, 1<sup>st</sup> edition, John Wiley & Sons, Inc. (2007).

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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