Product Information

Carprofen
Item No. 16409

CAS Registry No.: 53716-49-7
Formal Name: 6-chloro-α-methyl-9H-carbazole-2-acetic acid
Synonyms: Carprofyl, NSC 297935
MF: C15H12ClNO2
FW: 273.7
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: \( \lambda_{\text{max}} \) 239, 263, 301, 332, 345 nm

Laboratory Procedures

For long term storage, we suggest that carprofen be stored as supplied at -20°C. It should be stable for at least two years. Carprofen is supplied as a crystalline solid. A stock solution may be made by dissolving the carprofen in the solvent of choice. Carprofen is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of carprofen in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

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

Carprofen is a non-steroidal anti-inflammatory drug (NSAID) commonly used in animals to combat pain and inflammation, particularly as associated with osteoarthritis.1,2 Like many NSAIDs, carprofen inhibits both cyclooxygenases COX-1 and COX-2 (IC50 = 22.3 and 3.9 µM, respectively).3,4 It also inhibits fatty acid amide hydrolase (IC50 = 74 µM), blocking the metabolism of the cannabinoid receptor ligand, arachidonoyl ethanolamide (Item No. 90050).4,5

References

Related Products
For a list of related products please visit: [www.caymanchem.com/catalog/16409](http://www.caymanchem.com/catalog/16409)