PRODUCT INFORMATION



4-Biphenylacetic Acid

Item No. 38116

CAS Registry No.: 5728-52-9

Formal Name: [1,1'-biphenyl]-4-acetic acid Synonyms: p-Biphenylacetic Acid, Cl-83544,

Felbinac, LY61017, NSC 16284

MF: $C_{14}H_{12}O_2$ 212.2 FW: **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

4-Biphenylacetic acid is supplied as a solid. A stock solution may be made by dissolving the 4-biphenylacetic acid in the solvent of choice, which should be purged with an inert gas. 4-Biphenylacetic acid is slightly soluble in methanol and acetonitrile.

Description

4-Biphenylacetic acid is a non-steroidal anti-inflammatory drug (NSAID) and an active metabolite of the prodrug fenbufen (Item No. 28851). It inhibits prostaglandin E_2 (PGE $_2$; Item No. 14010) synthesis in a cell-free assay (IC₅₀ = 3.2 μ M). In vivo, 4-biphenylacetic acid (2 mg/kg) suppresses UV-induced erythema in guinea pigs. 4-Biphenylacetic acid (16 mg/kg) reduces inflammation in a rat model of adjuvant-induced arthritis. It decreases phenylquinone-induced writhing in mice (ED₅₀ = 9.9 mg/kg).²

References

- 1. Kerwar, S.S. Pharmacologic properties of fenbufen. Am. J. Med. 75(4B), 62-69 (1983).
- 2. Brodgen, R.N., Heel, R.C., Speight, T.M., et al. Fenbufen: A review of its pharmacological properties and therapeutic use in rheumatic diseases and acute pain. Drugs 21(1), 1-22 (1981).

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

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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