PRODUCT INFORMATION



Benzydamine-d₆ (hydrochloride)

Item No. 40112

CAS Registry No.: 1246817-20-8

Formal Name: N,N-dimethyl-3-[[1-(phenylmethyl-d₆)-

1H-indazol-3-yl]oxy]-1-propanamine,

monohydrochloride

MF: C₁₉H₁₇D₆N₃O ● HCI

351.9 FW:

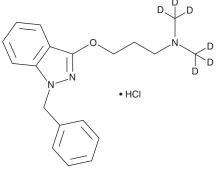
Chemical Purity: ≥98% (Benzydamine)

Deuterium

Incorporation: ≥99% deuterated forms (d_1-d_6) ; ≤1% d_0

Supplied as: A solid -20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

Benzydamine-d₆ (hydrochloride) is intended for use as an internal standard for the quantification of benzydamine by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Benzydamine-d₆ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the benzydamine-d₆ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Benzydamine-d₆ (hydrochloride) is slightly soluble in chloroform and methanol.

Description

Benzydamine is a non-steroidal anti-inflammatory drug (NSAID). It inhibits LPS-induced TNF- α and IL-1 β production in isolated human peripheral blood mononuclear cells (PBMCs) when used at concentrations of 12, 25, and 50 μ M. In vivo, benzydamine (20 mg/kg) reduces serum and lung levels of TNF- α and IL-1 β , as well as mortality, in a mouse model of LPS-induced endotoxemia. Benzydamine (100 mg/kg) reduces acetic acid-induced writhing in rats.³ Formulations containing benzydamine have been used as analgesics.

References

- 1. Sironi, M., Massimiliano, L., Transidico, P., et al. Differential effect of benzydamine on pro-versus anti-inflammatory cytokine production: Lack of inhibition of interleukin-10 and interleukin-1 receptor antagonist. Int. J. Clin. Lab. Res. 30(1), 17-19 (2000).
- 2. Guglielmotti, A., Aquilini, L., Rosignoli, M.T., et al. Benzydamine protection in a mouse model of endotoxemia. Inflamm. Res. 46(9), 332-335 (1997).
- 3. Alaiye, A., Kaya, E., Pınarbaşlı, M.Ö., et al. An experimental comparison of the analgesic and anti-inflammatory effects of safflower oil, benzydamine HCl, and naproxen sodium. J. Med. Food 23(8), 862-869 (2020).

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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