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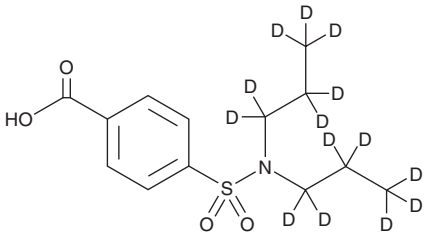
PRODUCT INFORMATION

Probenecid-d_{14}

Item No. 26787

CAS Registry No.: 1189657-87-1
Formal Name: 4-[[di(propyl-1,1,2,2,3,3,3-d_7)amino] sulfonyl]-benzoic acid
MF: $C_{13}H_5D_{14}NO_4S$
FW: 299.4
Chemical Purity: ≥98% (Probenecid)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_{14}); ≤1% d_0
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Probenecid-d_{14} is intended for use as an internal standard for the quantification of probenecid (Item No. 14981) 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).

Probenecid-d_{14} is supplied as a solid. A stock solution may be made by dissolving the probenecid-d_{14} in the solvent of choice. Probenecid-d_{14} is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of probenecid-d_{14} in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Probenecid is a benzoic acid derivative that inhibits organic anion transporters (OATs) but activates the transient receptor potential (TRP) channel TRPV2. It inhibits OAT1, OAT3, and OAT6 with K_i values of 6.3, 9.0, and 8.4 µM, respectively, as well as OAT2 with an IC_{50} value of 0.67 µM.[1-3] It is a poor inhibitor of the organic cation transporters OCT1 and OCT2 (IC_{50} = 1.6 and 1.7 mM, respectively).[4] It also acts as an agonist of TRPV2 (EC_{50} = 31.9 µM), eliciting nociceptive behavior under inflammatory conditions in mice. Formulations containing probenecid have been used in the treatment of gouty arthritis.[5]

References

1. Kaler, G., Truong, D.M., Khandelwal, A., *et al. J. Biol. Chem.* **282(33)**, 23841-23853 (2007).
2. Takeda, M., Narikawa, S., Hosoyamada, M., *et al. Eur. J. Pharmacol.* **419(2-3)**, 113-120 (2001).
3. Khamdang, S., Takeda, M., Shimoda, M., *et al. J. Pharmacol. Sci.* **94(2)**, 197-202 (2004).
4. Arndt, P., Volk, C., Gorboulev, V., *et al. Am. J. Physiol. Renal Physiol.* **281(3)**, F454-F468 (2001).
5. Robbins, N., Koch, S.E., Tranter, M., *et al. Cardiovasc. Toxicol.* **12(1)**, 1-9 (2012).

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