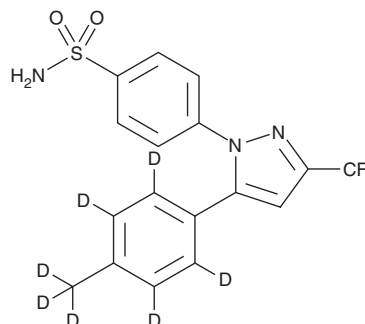


PRODUCT INFORMATION



Celecoxib-d₇ Item No. 18248

CAS Registry No.: 544686-21-7
Formal Name: 4-[5-[4-(methyl-d₃)phenyl-2,3,5,6-d₄]-3-(trifluoromethyl)-1H-pyrazol-1-yl]-benzenesulfonamide
MF: C₁₇H₇D₇F₃N₃O₂S
FW: 388.4
Chemical Purity: ≥98% (Celecoxib)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₇); ≤1% d₀
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

Celecoxib-d₇ is intended for use as an internal standard for the quantification of celecoxib (Item No. 10008672) 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).

Celecoxib-d₇ is supplied as a solid. A stock solution may be made by dissolving the celecoxib-d₇ in the solvent of choice. Celecoxib-d₇ is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of celecoxib-d₇ in these solvents is approximately 33 and 76 mg/ml, respectively.

Description

Celecoxib is a selective inhibitor of COX-2 (IC₅₀s = 22.9 and 0.05 μM for COX-1 and COX-2, respectively).^{1,2} It displays chemopreventive activity in multiple tumor types *via* proapoptotic effects that are independent of COX-2 inhibition.³⁻⁵ Formulations containing celecoxib have been used in the treatment of inflammation while circumventing the gastrointestinal toxicity associated with traditional non-steroidal anti-inflammatory drugs, however, the use of celecoxib has been tempered due to its ability to induce adverse cardiovascular events.⁶

References

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2. Mardini, I.A. and Fitzgerald, G.A. *Mol. Interv.* **1(1)**, 30-38 (2001).
3. Jendrossek, V., Handrick, R., and Belka, C. *FASEB J.* **17(11)**, 1547-1549 (2003).
4. Leahy, K.M., Ornberg, R.L., Wang, Y., *et al.* *Cancer Res.* **62(3)**, 625-631 (2002).
5. Zhu, J., Huang, J.-W., Tseng, P.-H., *et al.* *Cancer Res.* **64(12)**, 4309-4318 (2004).
6. Blobaum, A.L. and Marnett, L.J. *J. Med. Chem.* **50(7)**, 1425-1441 (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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