Indapamide- ${ }^{13} \mathrm{C}-\mathrm{d}_{3}$<br>Item No. 34244

CAS Registry No.: 2934053-07-1
Formal Name: $\quad 3$-(aminosulfonyl)-4-chloro-N-(2,3-dihydro-(2-methyl- $\left.{ }^{13} \mathrm{C}-\mathrm{d}_{3}\right)-1 \mathrm{H}$-indol-1-yl)benzamide
MF: $\quad \mathrm{C}_{15}\left[{ }^{[13} \mathrm{C}\right] \mathrm{H}_{13} \mathrm{D}_{3} \mathrm{ClN}_{3} \mathrm{O}_{3} \mathrm{~S}$
FW: 369.8
Chemical Purity: $\quad \geq 90 \%$ (Indapamide)
Deuterium
Incorporation:
Supplied as:
Storage:
Stability:
( $\mathrm{d}_{1}-\mathrm{d}_{3}$ ); $\leq 1 \% \mathrm{~d}_{0}$
A solid
$-20^{\circ} \mathrm{C}$
$\geq 4$ years


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

## Laboratory Procedures

Indapamide $-{ }^{13} \mathrm{C}-\mathrm{d}_{3}$ is intended for use as an internal standard for the quantification of indapamide 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).
Indapamide $-{ }^{13} \mathrm{C}-\mathrm{d}_{3}$ is supplied as a solid. A stock solution may be made by dissolving the indapamide${ }^{13} \mathrm{C}-\mathrm{d}_{3}$ in the solvent of choice, which should be purged with an inert gas. Indapamide $-{ }^{13} \mathrm{C}-\mathrm{d}_{3}$ is soluble in ethanol, methanol, acetonitrile, DMSO, and dimethyl formamide.

## Description

Indapamide is a carbonic anhydrase (CA) inhibitor ( $\mathrm{K}_{\mathrm{i}} \mathrm{s}=0.23,36,10$, and 13 nM for CAVII, CAIX, CAXII, and CAXIII, respectively). ${ }^{1}$ It is selective for these CAs over CAI-CAVI and CAXIV ( $\mathrm{K}_{\mathrm{i}} \mathrm{s}=213->10,000 \mathrm{nM}$ ). Indapamide is a thiazide-like diuretic that reduces blood pressure in spontaneously hypertensive rats (SHRs). ${ }^{2}$ It also increases urinary and renovascular levels of 11,12-EET and 14,15-EET, decreases urinary levels of $11,12-\mathrm{DiHET}$ and $14,15-\mathrm{DiHET}$, and reduces renal cortical malondialdehyde levels in SHRs. Formulations containing indapamide have been used in the treatment of hypertension, as well as salt and fluid retention associated with congestive heart failure.

## References

1. Temperini, C., Cecchi, A., Scozzafava, A., et al. Carbonic anhydrase inhibitors. Comparison of chlorthalidone and indapamide X-ray crystal structures in adducts with isozyme II: When three water molecules and the keto-enol tautomerism make the difference. J. Med. Chem. 52(2), 322-328 (2019).
2. Ma, F., Lin, F., Chen, C., et al. Indapamide lowers blood pressure by increasing production of epoxyeicosatrienoic acids in the kidney. Mol. Pharmacol. 84(2), 286-295 (2013).

## 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.

