

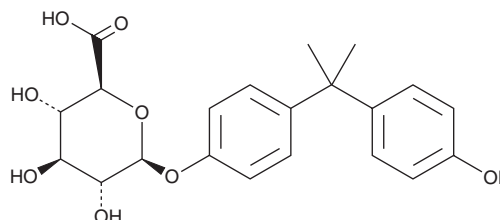
PRODUCT INFORMATION



Bisphenol A- β -D-Glucuronide

Item No. 35857

CAS Registry No.: 267244-08-6
Formal Name: β -D-glucopyranosiduronic acid, 4-[1-(4-hydroxyphenyl)-1-methylethyl]phenyl
Synonyms: BPA-glucuronide, BPA- β -D-glucuronide, BPA-monoglucuronide, BPAG
MF: $C_{21}H_{24}O_8$
FW: 404.4
Purity: $\geq 95\%$
Supplied as: A solution in methanol
Storage: -20°C
Stability: ≥ 4 years



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

Description

Bisphenol A- β -D-glucuronide (BPA-glucuronide) is an inactive metabolite of the plasticizer BPA.^{1,2} It is formed from BPA primarily by the UDP-glucuronosyltransferase (UGT) isoform UGT2B15.³ Unlike BPA, BPA-glucuronide does not bind to estrogen receptors (ERs) in cell-free assays or induce ER-mediated transcription in a reporter assay using MCF-7 cells.⁴ BPA-glucuronide blood levels are lower in patients with Parkinson's disease compared to individuals without Parkinson's disease with the same blood levels of total BPA, which includes BPA and BPA-glucuronide.⁵

References

1. Völkel, W., Bittner, N., and Dekant, W. Quantitation of bisphenol A and bisphenol A glucuronide in biological samples by high performance liquid chromatography-tandem mass spectrometry. *Drug Metab. Dispos.* **33**(11), 1748-1757 (2005).
2. Stein, T.P., Schluter, M.D., Steer, R.A., et al. Bisphenol-A and phthalate metabolism in children with neurodevelopmental disorders. *PLoS One* **18**(9), e0289841 (2023).
3. Hanioka, N., Naito, T., and Narimatsu, S. Human UDP-glucuronosyltransferase isoforms involved in bisphenol A glucuronidation. *Chemosphere* **74**(1), 33-36 (2008).
4. Matthews, J.B., Twomey, K., and Zacharewski, T.R. In vitro and in vivo interactions of bisphenol A and its metabolite, bisphenol A glucuronide, with estrogen receptors α and β . *Chem. Res. Toxicol.* **14**(2), 149-157 (2001).
5. Landolfi, A., Troisi, J., Savanelli, M.C., et al. Bisphenol A glucuronidation in patients with Parkinson's disease. *Neurotoxicology* **63**, 90-96 (2017).

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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