

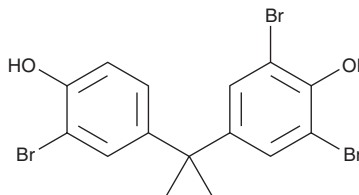
PRODUCT INFORMATION



2,2',6-Tribromobisphenol A

Item No. 9004566

CAS Registry No.: 6386-73-8
Formal Name: 2,6-dibromo-4-[1-(3-bromo-4-hydroxyphenyl)-1-methylethyl]-phenol
Synonyms: Tri-BBPA, Tribromobisphenol A
MF: C₁₅H₁₃Br₃O₂
FW: 465.0
Purity: ≥98%
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

2,2',6-Tribromobisphenol A (Tri-BBPA) is supplied as a solid. A stock solution may be made by dissolving the Tri-BBPA in the solvent of choice, which should be purged with an inert gas. Tri-BBPA is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

Tri-BBPA is a degradation product of the flame retardant tetrabromobisphenol A and an environmental contaminant.¹ It is an inhibitor of 12-lipoxygenase (12-LO) and 15-LO (IC₅₀s = 7 and 5 μM, respectively, for the human enzymes).² Tri-BBPA (60 μM) induces apoptosis and cell cycle arrest at the G₀/G₁ phase in primary human embryonic stem cells (ESCs).³ It decreases serum levels of total protein, albumin, γ-glutamyl transpeptidase (GGT), lactate dehydrogenase (LDH), creatine kinase (CK), and urea, increases serum levels of acetylcholinesterase (AChE), and disrupts hepatic metabolism of tryptophan (Item No. 29600) in mice when administered at a dose of 200 mg/kg per day for 14 days.⁴ Tri-BBPA has been found in industrial soil samples and human breast milk.^{1,5}

References

1. Liu, A., Shi, J., Qu, G., *et al.* Identification of emerging brominated chemicals as the transformation products of tetrabromobisphenol A (TBBPA) derivatives in soil. *Environ. Sci. Technol.* **51**(10), 5434-5444 (2017).
2. Segraves, E.N., Shah, R.R., Segraves, N.L., *et al.* Probing the activity differences of simple and complex brominated aryl compounds against 15-soybean, 15-human, and 12-human lipoxygenase. *J. Med. Chem.* **47**(16), 4060-4065 (2004).
3. Yang, Y., He, S., Qi, Z., *et al.* Proliferation toxicity and mechanism of novel mixed bromine/chlorine transformation products of tetrabromobisphenol A on human embryonic stem cell. *J. Hazard. Mater.* **449**, 131050 (2023).
4. Kuang, H.X., Dong, C.Y., Yan, L., *et al.* Exposure to synthesized tribromobisphenol A and critical effects: Metabolic pathways, disease signature, and benchmark dose derivation. *Sci. Total Environ.* **932**, 173117 (2024).
5. Nakao, T.A., Akiyama, E., Kakutani, H., *et al.* Levels of tetrabromobisphenol A, tribromobisphenol A, dibromobisphenol A, monobromobisphenol A, and bisphenol a in Japanese breast milk. *Chem. Res. Toxicol.* **28**(4), 722-728 (2015).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM