

Hydroxy C60

Pharma/Biotech

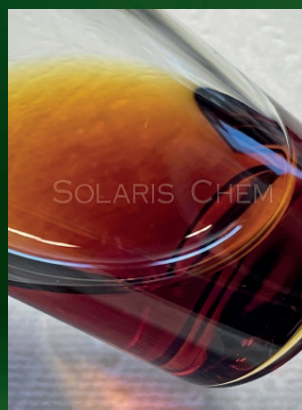
Water soluble

Description

NEUROBIUM HYDROXY Fullerenol C60 is a water-soluble research-grade derivative of fullerene C60 with formula C60(OH)_n. Hydroxylation of C60, makes it highly soluble in aqueous media, enabling its use in biological systems, neurodegenerative disease models, oxidative stress assays, and nanomedicine. It maintains a strong radical-scavenging capacity and mimics SOD activity for targeted neuro- and organ protection. ^{2,7,8}

Key Research Applications :

- **Aqueous Neuroprotection:** Fullerenol nanoparticles reduce oxidative stress and inhibit neuronal apoptosis in biological models. ^{2,7,9}
- **Organ Protection:** Studied for protective properties against toxicity in cardiotoxicity, hepatotoxicity, and nephrotoxicity models. ^{4,6,9}
- **Solvent-Free Synthesis:** Produced via a Solaris Chem proprietary solvent-free synthetic method, resulting in a pristine material free of solvents.



References

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3. Zhu, Y.; et al. Fullerene C60 Conjugate with Folic Acid for Targeted Delivery to Tumor Cells. *Pharmaceutics* 2023, 15 (3), 982.
4. Koushki, K.; et al. Radioprotective fullerene derivative to alleviate radiation-induced cardiovascular disease. *Proc. Am. Assoc. Cancer Res.* 2026, 86 (7_Suppl), Abstract nr 4626.
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6. Thompson, J. R.; et al. Effect of Fullerenol C60(OH)24 on the Viability and Metabolism of THP-1 Human Monocytic Leukemia Cells. *Toxicol. In Vitro* 2025, 102, 105782.
7. Injac, R.; et al. Neuroprotective potential of fullerenol nanoparticles. *Pharmacol. Rep.* 2011, 63 (1), 221–222.
8. Grębowski, J.; et al. Fullerenol C60(OH)36 Protects Antioxidant Enzymes against Oxidative Damage in Human Erythrocytes. *Antioxidants* 2022, 11 (9), 1754.



Neurobium Hydroxy C60

SOL5369YN

Available from g level (for R&D, Tech centers and universities) to kg level (for industrial developments).



PRODUCT SPECIFICATIONS

Grade 99.95% (SOL5369YN)

Solvent-free* 

*Optimized for high solubility in water and aqueous buffers.

**Purity preservation: Packed under inert medical nitrogen gas to inhibit oxidation.

***Synthesized via a Solvent-Free Method (A Solaris Chem Inc proprietary solvent-free synthetic method is used, resulting in a solvent free material).



Green chemistry



Environmentally friendly

SUSTAINABILITY is fundamental to our operations and serves as the driving force behind our growth. At Solaris Chem, we emphasize the principles of green chemistry, minimize waste, recover and recycle solvents and materials to the greatest extent possible, and utilize renewable hydroelectric energy to support our activities.

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