

# PRODUCT INFORMATION

## PAMAM Dendrimer G0.5 Carboxylate (sodium salt) (water solution)

Item No. 39104

**CAS Registry No.:** 339334-01-9  
**Formal Name:** 11,14-bis[3-[[2-[bis(2-carboxyethyl)amino]ethyl]amino]-3-oxopropyl]-4,21-bis(2-carboxyethyl)-8,17-dioxo-4,7,11,14,18,21-hexaazatetracosanedioic acid, octasodium salt

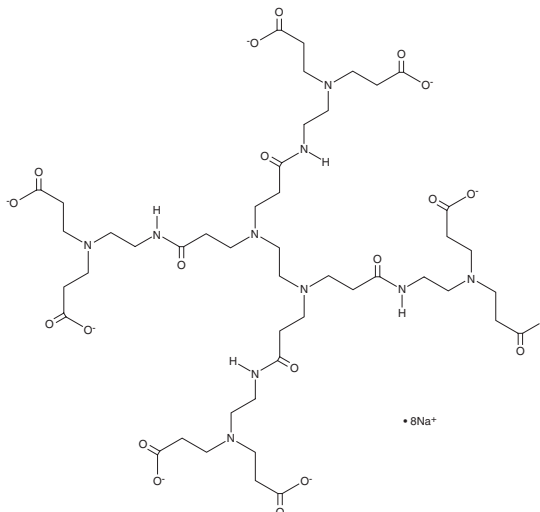
**Synonyms:** PAMAM G0.5 Carboxylate, Polyamidoamine Dendrimer G0.5 Carboxylate

**MF:** C<sub>46</sub>H<sub>72</sub>N<sub>10</sub>O<sub>20</sub> • 8Na  
**FW:** 1,269.1

**Supplied as:** A solution in water

**Storage:** -20°C

**Stability:** ≥2 years



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

### Description

PAMAM dendrimer G0.5 carboxylate (PAMAM G0.5) is a polyamidoamine (PAMAM) dendrimer with carboxylate termini.<sup>1</sup> It is approximately 27.9 Å in diameter in water and has 8 surface groups.<sup>2</sup> Conjugates of PAMAM G0.5 with the active fragment of the DNA cross-linking agent oxaliplatin (Item No. 13106) are cytotoxic to A2780 ovarian, MCF-7 breast, and Caco-2 colon cancer cells and BJ fibroblasts (IC<sub>50</sub>s = 0.03, 1.6, 0.18, and 3 μM, respectively).

### References

1. Camacho, C., Tomás, H., and Rodrigues, J. Use of half-generation pamam dendrimers (G0.5-G3.5) with carboxylate end-groups to improve the DACHPtCl<sub>2</sub> and 5-FU efficacy as anticancer drugs. *Molecules* **26(10)**, 2924 (2021).
2. Caminati, G., Turro, N.J., and Tomalia, D.A. Photophysical investigation of starburst dendrimers and their interactions with anionic and cationic surfactants. *J. AM. Chem. Soc.* **112(23)**, 8515-8522 (1990).

#### 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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