

# Non-Traditional Intrinsic Luminescence (NTIL): Dynamic Quenching Demonstrates the Presence of Two Distinct Fluorophore Types Associated with NTIL Behavior in Pyrrolidone-Terminated PAMAM Dendrimers

Maciej Studzian<sup>1, 2</sup>, Łukasz Pułaski<sup>2, 3</sup>, Donald A. Tomalia<sup>4, 5, 6</sup>, Barbara Klajnert-Maculewicz<sup>1</sup>

<sup>1</sup>*Department of General Biophysics, Faculty of Biology and Environmental Protection, University of Lodz, 141/143 Pomorska St., 90-236 Lodz, Poland*

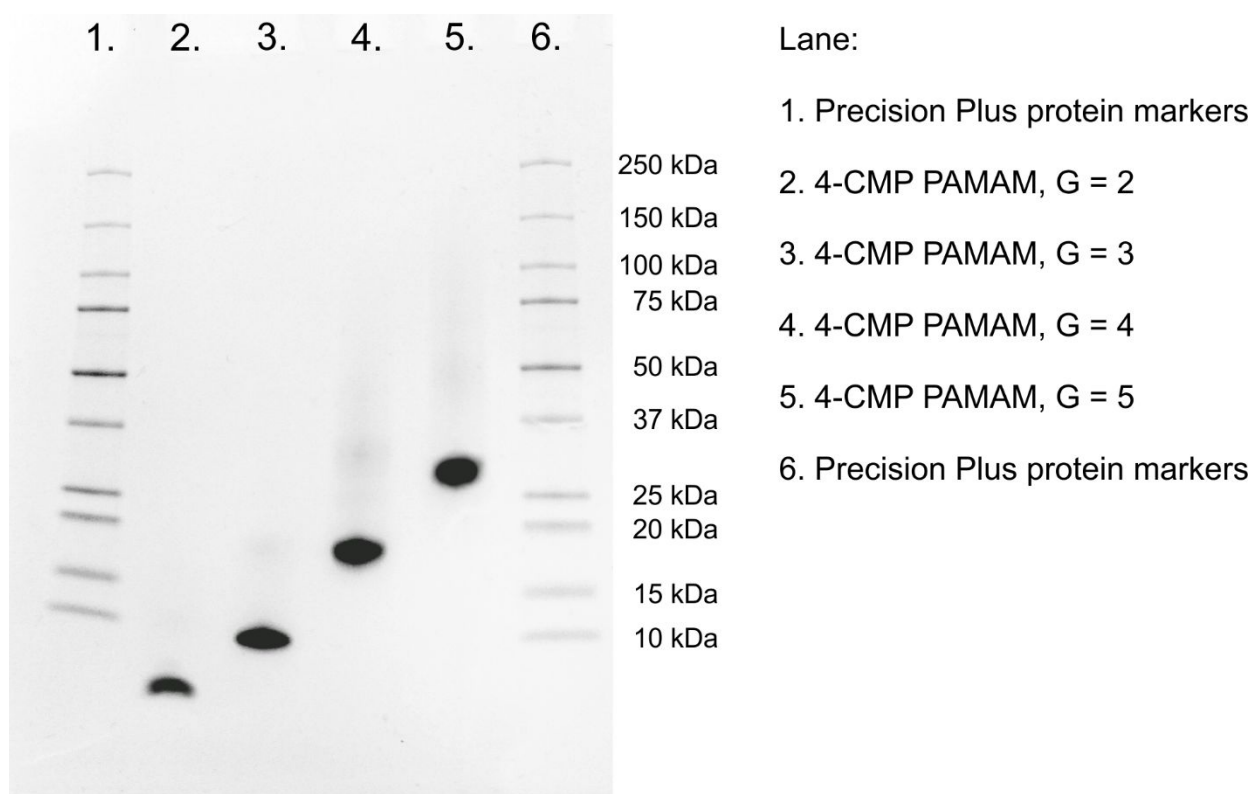
<sup>2</sup>*Department of Molecular Biophysics, Faculty of Biology and Environmental Protection, University of Lodz, Banacha 12/16, 90-237 Lodz, Poland*

<sup>3</sup>*Laboratory of Transcriptional Regulation, Institute of Medical Biology PAS, Lodowa 106, 93-232 Lodz, Poland*

<sup>4</sup>*NanoSynthons LCC, 1200 N. Fancher Avenue, Mt. Pleasant, MI 48858, USA*

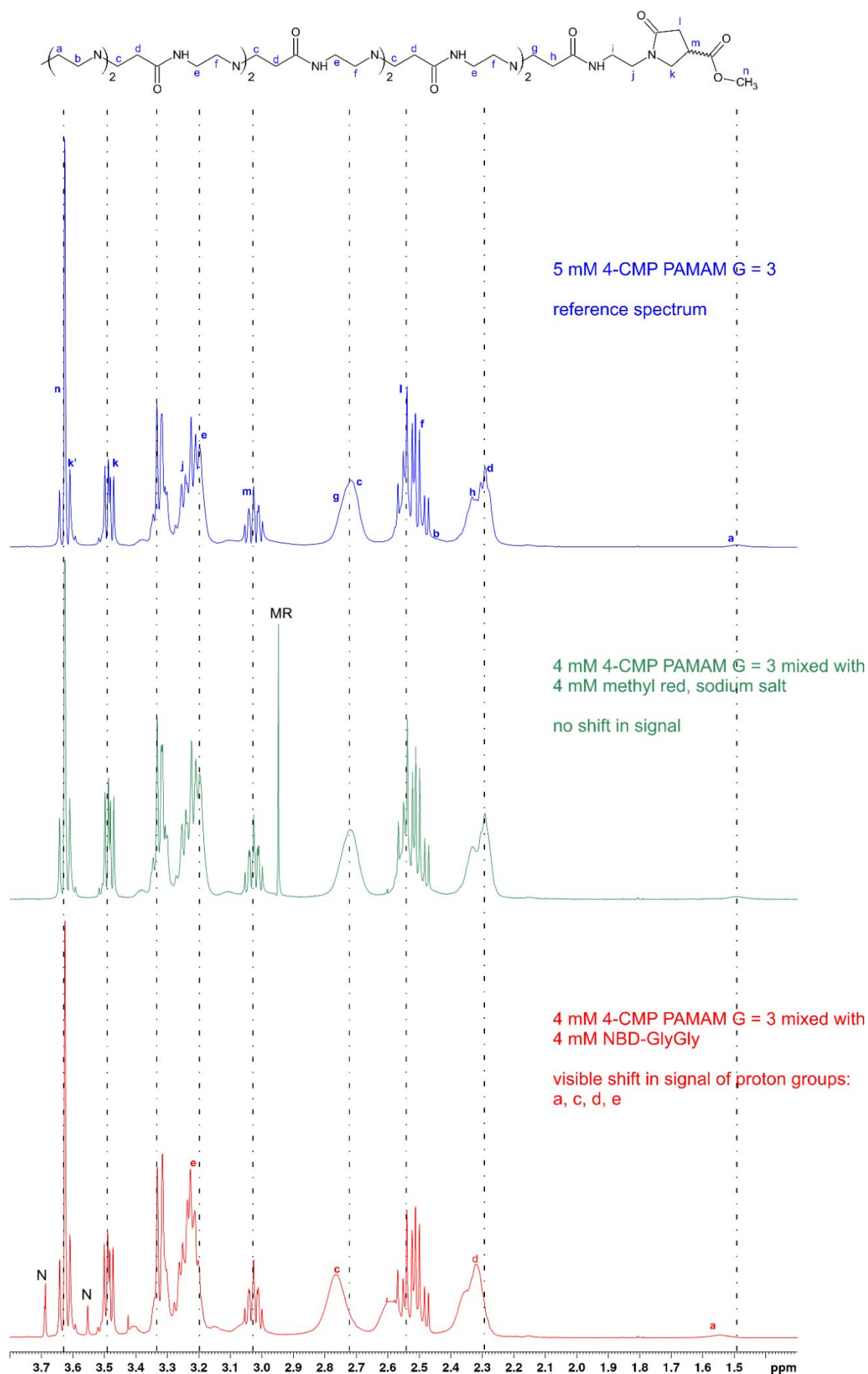
<sup>5</sup>*Department of Chemistry, University of Pennsylvania, Philadelphia, PA, USA*

<sup>6</sup>*Department of Physics, Virginia Commonwealth University, Richmond, VA, USA*



**Fig S1.** SDS-PAGE analysis of 4-CMP PAMAM preparations used in this study. Mini-PROTEAN TGX precast 4%-20% gradient gel was run in standard Tris-glycine buffer with 0.1% SDS.

$^1\text{H-NMR}$  (600 MHz, Bruker Avance III,  $\text{D}_2\text{O}$  with water suppression)



**Fig S2.**  $^1\text{H-NMR}$  study of 4-CMP PAMAM dendrimer interaction with quenchers used in this study: methyl red and NBD-GlyGly. MR – protons from methyl red; N – protons from NBD-GlyGly.