

**Title: Design, Synthesis and Evaluation of 4,5,6,7-Tetrahydrobenzo[d]thiazole-Based Novel Dual Kinase Inhibitors of CK2 and GSK3 $\beta$**

**Journal:** Medicinal Chemistry Communications

**Authors:** Triveni R. Pardhi<sup>a</sup>, Manishkumar S. Patel<sup>b</sup>, V. Sudarsanam<sup>c</sup>, Kamala K. Vasu<sup>a,c,\*</sup>

**Affiliations:**

<sup>a</sup>Department of Natural Products, National Institute of Pharmaceutical Education and Research (NIPER)-Ahmedabad, Gandhinagar-382355, Gujarat, India

<sup>b</sup>Department of Biotechnology, National Institute of Pharmaceutical Education and Research (NIPER)-Ahmedabad, Gandhinagar-382355, Gujarat, India

<sup>c</sup>Department of Medicinal Chemistry, B. V. Patel Pharmaceutical Education & Research Development (PERD) Centre, Ahmedabad-380054, Gujarat, India.

\*Corresponding Author e-mail address: [kamalav@perdcentre.com](mailto:kamalav@perdcentre.com), [triveni.pardhi@gmail.com](mailto:triveni.pardhi@gmail.com)

**Supplementary file 3:** <sup>1</sup>H NMR, D<sub>2</sub>O exchange NMR and <sup>13</sup>C NMR of compound 1g







