2-D08 is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-D08 in the solvent of choice. 2-D08 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2-D08 in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF. 2-D08 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2-D08 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 2-D08 has a solubility of approximately 0.05 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

**Description**

2-D08 is a synthetic flavone that inhibits sumoylation. It completely inhibits sumoylation in microfluidic electrophoretic mobility shift and kinetic assays at a concentration of 30 µM. 2-D08 inhibits sumoylation of topoisomerase I in the breast cancer cell lines ZR-75-1 and BT-474. It specifically disrupts the transfer of SUMO from the E2 enzyme (UBC9) thioester conjugate to the substrate. 2-D08 prevents amyloid-β (Aβ) (1-42) aggregation and Aβ-induced toxicity in PC12 cells. It also has antioxidant properties.

**References**