Tyrphostin AG 1478

400 µg

Background: Tyrphostin AG 1478 is a tyrosine kinase inhibitor specifically selective to EGFR (ErbB1), with an IC₅₀ of about 3 nM in vitro (1,2). Treatment of cell with 50-150 nM of AG 1478 can substantially block EGFR activation in vivo (3). In addition to EGFR, AG 1478 also inhibits ErbB4 activation induced by radiation in cancer cells (4). Testing of AG 1478 alone or in combination with other treatments to assess anti-tumor and anti-fibrotic effectiveness has yielded promising results (5-8).

Molecular Formula: C₁₆H₁₄ClIN₃O₂

Molecular weight: 315.76 g/mol

Directions For Use: Tyrphostin AG 1478 is supplied as 400 µg powder. Store at or below -20°C. Before use, dissolve powder in 1.23 ml DMSO to make a 1 mM Tyrphostin AG 1478 stock solution. For working concentrations of 100 nM-200 nM, dilute DMSO stock 1:10,000 to 1:5,000. Treat cells with the desired concentration for 30 minutes.

Background References:

Storage: Store lyophilized or in solution at -20°C, desiccated. Protect from light. In lyophilized form, the chemical is stable for 24 months. Once in solution, use within 3 months to prevent loss of potency. Aliquot to avoid multiple freeze/thaw cycles.