BAY-876, GLUT1 inhibitor

Catalog	Unit
TBI4708-5MG	5 mg
TBI4708-25MG	25 mg

Product Details

Formal Name: N4-[1-(4-Cyanobenzyl)-5-methyl-3-(trifluoromethyl)-1H-pyrazol-4-yl]-7-fluoroquinoline-2,4-dicarboxamide Alternate Names: 4-N-[1-[(4-Cyanophenyl)methyl]-5-methyl-3-(trifluoromethyl)pyrazol-4-yl]-7-fluoroquinoline-2,4-dicarboxamide Molecular Formula: $C_{24}H_{16}F_{4}N_{6}O_{2}$ Formula Weight: 496.43 CAS Number: 1799753-84-6 Purity: >98% Formulation: powder Solubility: Soluble in DMSO (up to at least 25 mg/ml) Storage: -20°C Stability: \geq 2 years.

Applications

GLUT1 inhibitor

Functions

Potent inhibitor (IC50 = 2 nM) of the facilitative glucose transporter GLUT1, an enzyme frequently overexpressed in many cancers. It shows greater than 100-fold selectivity over GLUT2-4. BAY-876 displayed potent antitumor activity in ovarian cancer xenograft models and in triple negative breast cancer cells displaying high glycolytic and low oxidative phosphorylation rates. It reduced CD4+ T cell proliferation and IFN- γ secretion via GLUT1 inhibition suggesting utility against auto-inflammatory diseases. BAY-876 induces disulfidptosis in SLCA11high cancer cells.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° C for up to 3 months.

For research use only.