

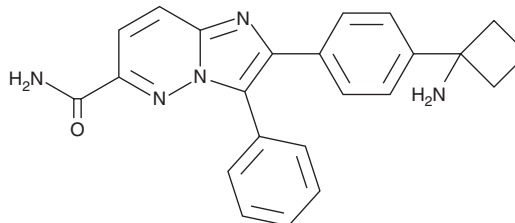
# PRODUCT INFORMATION



## BAY-1125976

Item No. 28913

**CAS Registry No.:** 1402608-02-9  
**Formal Name:** 2-[4-(1-aminocyclobutyl)phenyl]-3-phenyl-imidazo[1,2-b]pyridazine-6-carboxamide  
**MF:** C<sub>23</sub>H<sub>21</sub>N<sub>5</sub>O  
**FW:** 383.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 241, 379 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

BAY-1125976 is supplied as a crystalline solid. A stock solution may be made by dissolving the BAY-1125976 in the solvent of choice, which should be purged with an inert gas. BAY-1125976 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of BAY-1125976 in these solvents is approximately 3 and 5 mg/ml, respectively.

BAY-1125976 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BAY-1125976 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. BAY-1125976 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

BAY-1125976 is an allosteric inhibitor of Akt1 and -2 (IC<sub>50</sub>s = 5.2 and 18 nM, respectively, in a time-resolved FRET assay).<sup>1</sup> It is selective for Akt1 and -2 over Akt3 (IC<sub>50</sub> = 427 nM in the same assay) but does inhibit the activity of the receptor tyrosine kinases FLT1, -3, -4, and Mer by greater than 50% in a panel of 227 kinases at 1 μM. BAY-1125976 inhibits the proliferation of 23 cancer cell lines (IC<sub>50</sub>s = 0.02-10 μM) and reduces tumor growth in KPL-4, MCF-7, and patient-derived xenograft (PDX) mouse models when administered at a dose of 50 mg/kg per day.

### Reference

1. Politz, O., Siegel, F., Bärfacker, L., *et al.* BAY 1125976, a selective allosteric AKT1/2 inhibitor, exhibits high efficacy on AKT signaling-dependent tumor growth in mouse models. *Int. J. Cancer* **140**(2), 449-459 (2017).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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