**Product Specification Sheet**

**Product Name:** AP24534 (Ponatinib)  
**Catalog Number:** C2724

**Technical Information:**

- **Chemical Formula:** C_{29}H_{27}F_{3}N_{6}O  
- **CAS #:** 943319-70-8  
- **Molecular Weight:** 532.57  
- **Purity:** > 98%  
- **Appearance:** White solid  
- **Solubility:** Soluble in DMSO up to 100 mM  
- **Chemical Name:** 3-[(2-[(imidazo[1,2-b]pyridazin-3-yl)ethynyl]-4-methyl-N-(4-[(4-methylpiperazin-1-yl)methyl]-3-(trifluoromethyl)phenyl)benzamide  
- **Storage:** Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.  
- **Shelf Life:** In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

**Handling:**
- To make 10 mM stock solution, add 0.188mL of DMSO for each mg of AP24534 (Ponatinib)  
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** Ponatinib (AP24534) is an imidazopyridine-based pan-inhibitor of the kinases Abl, Abl(T315I), and other clinically important Abl kinase domain mutants at potencies of 0.37 nM, 2.0 nM, and 0.30-0.44 nM, respectively. Ponatinib also potently inhibits Src, VEGFR, FGFR, and PDGFR at 5.4, 1.5, 22, and 1.1 nM, respectively, while being >1000-fold selective over IGF-1R, Aurora A, and CDK2/Cyclin E. [1] In contrast to first- (imatinib) and second-line therapies (nilotinib, dasatinib) for CML, Ponatinib shows inhibition against the T311 mutant of Bcr-Abl.

In a panel of leukemic cell lines containing activating mutations in Flt3, Kit, or activating fusions of FGFR, PDGFRα, EOL1, and KG-1, Ponatinib inhibited phosphorylation of all four receptor tyrosine kinases in a dose dependent manner with IC50 values between 0.3 and 20 nM. [2] Apoptotic induction is believed to be the mechanism by which Ponatinib inhibits FLT3-ITD to in turn inhibit MV4-11 cell viability. [2]

**Reference:**

To reorder: [http://www.cellagentech.com/AP24534-Ponatinib/](http://www.cellagentech.com/AP24534-Ponatinib/)  
For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*For research use only, not for clinical or diagnostic use.*