

## Product Specification Sheet

**Product Name:** AS-703026 (Pimasertib)

**Catalog Number:** C2770

**Technical information:**

Chemical Formula:  $C_{15}H_{15}FIN_3O_3$

CAS #: 1236699-92-5

Molecular Weight: 431.2

Purity: > 99%

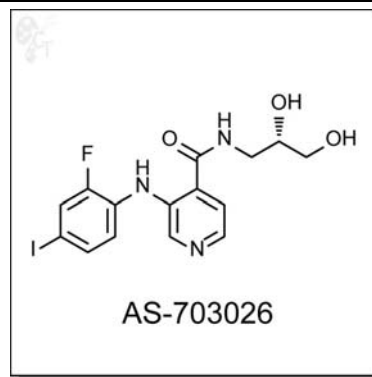
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: (S)-N-(2,3-dihydroxypropyl)-3-(2-fluoro-4-iodophenylamino)isonicotinamide - See more at: <http://www.selleckchem.com/products/AS703026.html#sthash.ajQXgXlc.dpuf>

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 0.232 mL of DMSO for each mg of AS-703026 (Pimasertib).
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** AS-703026 is an orally-available, allosteric inhibitor of MEK1/2 kinases. In multiple myeloma (MM) cell lines, AS-703026 inhibits growth in a dose-dependent manner, with IC50s ranging from 5 nM to 2 μM. Furthermore in INA-6 and U266 cells, AS-703026 exhibited an IC50 of 10 nM and 5 nM, respectively. AS-703026 inhibits proliferation by mediating G0-G1 cell cycle arrest and also induces apoptosis via caspase 3 and PARP cleavage in MM cells. (1)

AS-703026 specifically inhibits MEK's downstream target kinase ERK on the average of 5-fold more potently than AZD6244. Additionally, cetuximab-resistant colorectal cancer cell lines were inhibited by AS-703026, displaying its efficacy against K-ras mutations. (2)

- Reference:**
1. Kim et al., Blockade of the MEK/ERK signalling cascade by AS703026, a novel selective MEK1/2 inhibitor, induces peliotropic anti-myeloma activity in vitro and in vivo. Br. J. Haematol. 2010, 149, 537-549. Pubmed ID: 20331454
  2. Yoon et al., MEK1/2 Inhibitors AS703026 and AZD6244 May Be Potential Therapies for KRAS Mutated Colorectal Cancer That Is Resistant to EGFR Monoclonal Antibody Therapy. Cancer Res. 2011, 71, 445-453. Pubmed ID: 21118963

To reorder: <http://www.cellagentech.com/AS-703026-Pimasertib/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*