# Product Specification Sheet

**Product Name:** CP-868596 (Crenolanib)  
**Catalog Number:** C2786

### Technical information:
- **Chemical Formula:** C_{26}H_{29}N_{5}O_{2}  
- **CAS #:** 670220-88-9  
- **Molecular Weight:** 443.54  
- **Purity:** > 98%  
- **Appearance:** White solid  
- **Solubility:** Soluble in DMSO up to 100 mM  
- **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 0.225mL of DMSO for each mg of CP-868596 (Crenolanib)  
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

### Biological Activity:  
CP868596 (Crenolanib) is an orally-available, benzimidazole-based inhibitor of PDGFRα and PDGFRβ with IC50 values of 0.9 and 1.8 nM, respectively. Furthermore, CP868596 is active against the D842V mutant of PDGFRα, inhibiting phosphorylation at an IC50 range of 10-30 nM (wild-type PDGFRα IC50 = 10 nM). [1] Whereas imatinib, sunitinib, sorafenib, and nilotinib have little to no activity vs. this D842V mutant, CP868596 offers a novel therapy to GIST patients with this resistance.

CP868596 also shows potency (IC50 = 80 nM) against the highly sensitive H1703 cell line, suggesting single-agent therapy potential for PDGFR-driven NSCLC tumors. [2]

### Reference:
2. "Crenolanib (CP-868,596), a highly potent and selective PDGFR TKI inhibits growth of PDGFRα-driven lung cancer cells" AROG Pharmaceuticals and Southwestern Medical Center, AACR poster, 2011, Abstract 3601.

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**To reorder:** [http://www.cellagentech.com/CP-868596-Crenolanib/](http://www.cellagentech.com/CP-868596-Crenolanib/)  
**For Technical Support:** [technical@cellagentech.com](mailto:technical@cellagentech.com)

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