Product Specification Sheet

**Product Name:** PHA-793887  
**Catalog Number:** C7793

### Technical Information:
- **Chemical Formula:** C\textsubscript{19}H\textsubscript{31}N\textsubscript{5}O\textsubscript{2}  
- **CAS #:** 718630-59-2  
- **Molecular Weight:** 361.48  
- **Purity:** > 98%  
- **Appearance:** Off White solid  
- **Solubility:** Soluble in DMSO up to 100 nM  
- **Chemical Name:** N-(6,6-dimethyl-pyrrolo[3,4-c]pyrazol-3-yl)-1,4,5,6-tetrahydropyrrolo[3,4-c]pyrazol-3-yl)-3-methylbutanamide  
- **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 0.277mL of DMSO for each mg of PHA-793887.  
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

### Biological Activity:
PHA-793887 is an intravenously-administered, inhibitor of cyclin dependent kinases CDK2, CDK5, CDK7, at IC50s of 8 nM, 5 nM, and 10 nM, respectively. [1] As a multi-CDK isoform inhibitor, it was postulated that PHA-793887 might overcome resistance-based mechanisms and lead to enhanced tumor suppression. PHA-793887 was found in Phase I dose-ranging studies to induce severe dose-related hepatotoxicity, thus halting clinical studies. [2]

Additionally, PHA-793887 was found to impair TLR signaling, thus suppressing cytokine production (type 1 interferon, interleukin-6, -10, -12, and TNFα), thereby increasing susceptibility of cancer patients to diseases such as herpes viridae. [3]

PHA-793887 was found to be an effective tool compound for the monitoring of the E2F gene signature pathway. [4]

### Reference:

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

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