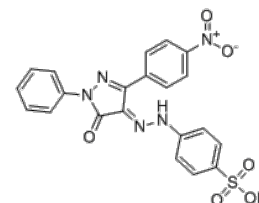


**Product Name** : PHPS1  
**Cat. No.** : PC-20340  
**CAS No.** : 314291-83-3  
**Molecular Formula** : C<sub>21</sub>H<sub>15</sub>N<sub>5</sub>O<sub>6</sub>S  
**Molecular Weight** : 465.44  
**Target** : Protein Phosphatase/PTP  
**Solubility** : 10 mM in DMSO



## Biological Activity

PHPS1 is a potent, specific and cell-permeable inhibitor of protein tyrosine phosphatase **Shp2** with  $K_i$  value of 0.73  $\mu$ M. PHPS1 displays 8- and 15-fold selectivity against most closely related PTPs, PTP1B, and Shp1. PHPS1 (5  $\mu$ M) inhibits HGF/SF-induced scattering and branching morphogenesis of MDCK epithelial cells. PHPS1 inhibits Shp2-dependent signaling pathways, inhibits Erk1/2 but not Akt and Stat3 phosphorylation in a dose-dependent manner in MDCK cells. PHPS1 effectively inhibits anchorage-independent growth of human tumor cells, which correlates strongly with their tumorigenicity and invasiveness.

## References

Klaus Hellmuth, et al. *Proc Natl Acad Sci U S A*. 2008 May 20;105(20):7275-80.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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