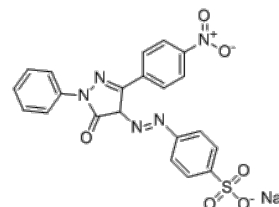


**Product Name** : PHPS1 sodium  
**Cat. No.** : PC-20341  
**CAS No.** : 1177131-02-0  
**Molecular Formula** : C<sub>21</sub>H<sub>14</sub>N<sub>5</sub>NaO<sub>6</sub>S  
**Molecular Weight** : 487.42  
**Target** : Protein Phosphatase/PTP  
**Solubility** : 10 mM in DMSO



## Biological Activity

PHPS1 sodium is a potent, specific and cell-permeable inhibitor of protein tyrosine phosphatase **Shp2** with Ki value of 0.73 uM.

PHPS1 displays 8- and 15-fold selectivity against most closely related PTPs, PTP1B, and Shp1.

PHPS1 (5 μM) 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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