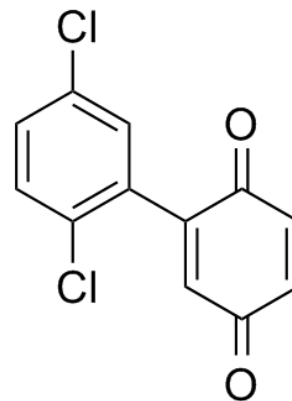


**Product Name** : TPI-1  
**Cat. No.** : PC-42166  
**CAS No.** : 79756-69-7  
**Molecular Formula** : C<sub>12</sub>H<sub>6</sub>Cl<sub>2</sub>O<sub>2</sub>  
**Molecular Weight** : 253.0808  
**Target** : Protein Phosphatase/PTP  
**Solubility** : 10 mM in DMSO



### Biological Activity

TPI-1 is a potent and selective, orally-active protein tyrosine phosphatases **SHP-1** inhibitor with IC<sub>50</sub> of 40 nM (0.01 ug/ml). TPI-1 has limited impact on recombinant MKP1 (IC<sub>50</sub>> 1 ug/ml) or SHP-2 (IC<sub>50</sub> ~ 0.1 ug/ml). TPI-1 selectively increases SHP-1 phospho-substrates (pLck-pY394, pZap70, and pSlp76) in Jurkat T cells at low nM, does not affect pLck-pY505 or pERK1/2. TPI-1 induces mouse splenic-IFN-gamma(+) cells, also induces IFN-γ(+) cells in human peripheral blood in vitro. TPI-1 inhibits the growth of B16 melanoma tumors in mice in a T cell-dependent manner.

### References

Kundu S, et al. *J Immunol.* 2010 Jun 1;184(11):6529-36.

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

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