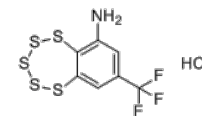


Product Name : TC-2153
Cat. No. : PC-62801
CAS No. : 1381769-23-8
Molecular Formula : C₇H₅ClF₃NS₅
Molecular Weight : 355.869
Target : Protein Phosphatase/PTP
Solubility : 10 mM in DMSO



Biological Activity

TC-2153 (TC2153) is a specific, small molecule inhibitor of **neuron-specific tyrosine phosphatase STEP** with IC₅₀ of 24.6 nM.

TC-2153 increases tyrosine phosphorylation of STEP substrates ERK1/2, Pyk2, and GluN2B, and exhibits no toxicity in cortical cultures.

TC-2153 shows specificity towards STEP compared to several other tyrosine phosphatases.

TC-2153 improves cognitive deficits in 3xTg-AD mice, with no change in beta amyloid and phospho-tau levels.

References

Kulikov AV, et al. *Psychopharmacology (Berl)*. 2012 Jun;221(3):469-78.

Xu J, et al. *PLoS Biol*. 2014 Aug 5;12(8):e1001923.

Baguley TD, et al. *Bioorg Med Chem Lett*. 2015 Mar 1;25(5):1044-6.

Chatterjee M, et al. *Neuropharmacology*. 2018 Jan;128:43-53.

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

E-mail: tech@probechem.com