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# **DATASHEET**

**BVT 948** 

### **Product overview**

Name BVT 948
Cat No HB0150
Biological action Inhibitor

**Description** Non-competitive irreversible PTP inhibitor

### **Biological Data**

**Biological description** Non-competitive irreversible protein tyrosine phosphatases (PTP) inhibitor ( $K_i = 1.2 \mu M$  for PTP-1B).

Inhibits a broad spectrum of PTP's (IC $_{50}$  values are 0.9, 1.7, 0.09, 1.5 and 0.7  $\mu$ M for PTP-1B, TCPTP, SHP-2, LAR and YopH respectively). Inhibits several cytochrome P450 isoforms and suppresses MMP-9 and blocks TPA-induced NF- $\kappa$ B activation. Exhibits no activity for MAPK. Enhances insulin

sensitivity. Cell permeable.

## **Solubility & Handling**

**Solubility overview** Soluble in ethanol or DMSO (50mM) **Storage instructions** Room temperature

Storage of solutions Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if

storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Shipping Conditions Stable for ambient temperature shipping. Follow storage instructions on receipt.

Important This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use.

### **Chemical Data**

Molecular Weight Chemical structure 241.25 N O OH

Molecular Formula
CAS Number
PubChem identifier

SMILES InChiKey C<sub>14</sub>H<sub>11</sub>NO<sub>3</sub> 39674-97-0 6604934

CC1(C2=C(C3=CC=C3C(=O)C2=O)NC1=O)C

LLPBUXODFQZPFH-UHFFFAOYSA-N

### References

Oxidation of protein tyrosine phosphatases as a pharmaceutical mechanism of action: a study using 4-hydroxy-3,3-dimethyl-2H-benzo[q]indole-2,5(3H)-dione.

Liljebris C *et al* (2004) J Pharmacol Exp Ther 309(2) **PubMedID** 14747616

Protein tyrosine phosphatase controls breast cancer invasion through the expression of matrix metalloproteinase-9.

Hwang BM *et al* (2013) BMB Rep 46(11) **PubMedID**24152909