# Tribioscience

## QNZ, NFkB inhibitor / Store-operated calcium entry

| Catalog      | Unit  |
|--------------|-------|
| TBI4009-5MG  | 5 mg  |
| TBI4009-25MG | 25 mg |

## **Product Details**

Formal Name: 4-N-[2-(4-Phenoxyphenyl)ethyl]quinazoline-4,6-diamine Alternate Names: EVP4593 Molecular Formula:  $C_{22}H_{20}N_4O$ Formula Weight: 356.42 CAS Number: 545380-34-5 Purity: >98% Formulation: powder Solubility: Soluble in DMSO (up to 20 mg/ml) Storage: -20°C Stability:  $\geq$  1 year.



#### **Applications**

NFkB inhibitor / Store-operated calcium entry

#### **Functions**

Originally described as a potent inhibitor of NF- $\kappa$ B activation (IC50 = 11 n) and TNF- $\alpha$  production (IC50 = 7 nM). Indirectly inhibits the NF- $\kappa$ B pathway via inhibition of store-operated calcium entry (SOC) and displayed neuroprotective effects in transgenic fly and mouse models of Huntington's disease. Its target has been postulated to be heteromeric calcium channels containing TRPC1 as one of the subunits. QNZ reduced synaptic neuronal SOC and rescued dendritic spine loss in YAC128 striatal medium spiny neurons. QNZ has also been identified as a potent and selective inhibitor of mitochondrial complex I (IC50 = 25 nM complex 1 from Y.lipolytica; IC50 = 14 nm complex 1 from Bos Taurus heart mitochondria). QNZ decreased PSEN1 $\Delta$ E9-mediated nSOCE upregulation and rescued mushroom spines in PSEN1 $\Delta$ E9-expressing neurons, which are linked to familial Alzheimer's disease.

### **Application Procedures**

First dissolved in DMSO (up to 20 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at  $-20^{\circ}$  for up to 1 month.

For research use only.