**Product Description**

QNZ is a quinazoline derivative that inhibits nuclear factor (NF)-κB activation (IC$_{50}$ = 11 nM in human Jurkat T lymphocyte cells). NF-κB enhances the transcription of pro-inflammatory cytokines, and QNZ inhibits lipopolysaccharide (LPS)-stimulated tumor necrosis factor (TNF)-α production in mouse splenocytes (IC$_{50}$ = 7 nM; Tobe et al.), as well as CXCL1-mediated pro-inflammatory increase in potassium currents in adult rat neurons (Yang et al.). It does not inhibit kinases in a standard screen (Wu et al.).

**Chemical Name:** N4-[2-(4-phenoxyphenyl)ethyl]-4,6-quinazolinediamine

**Structure:**

![Structure of QNZ](image)

**Properties**

**Physical Appearance:** A crystalline solid

**Storage:** Product stable at -20°C as supplied. Protect from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.

**Solubility:**

- DMSO ≤ 55 mM
- Absolute ethanol ≤ 25 mM

For example, to prepare a 10 mM stock solution in DMSO, resuspend 1 mg in 281 μL of DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at -20°C. Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.
Published Applications

DISEASE MODELING
- Blocks amyloid precursor protein release in human SH-SY5Y neuroblastoma cells caused by muscarinic receptor activation (Choi et al.).

MAINTENANCE
- Neuroprotective in a glutamate toxicity assay using YAC128 medium spiny neuron cultures (Wu et al.).

References


Related Small Molecules

For a complete list of small molecules available from STEMCELL Technologies, please visit our website at www.stemcell.com/smallmolecules or contact us at techsupport@stemcell.com.