

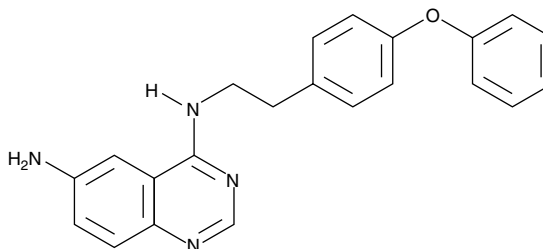
# Product Information



## QNZ

Item No. 10006734

**CAS Registry No.:** 545380-34-5  
**Formal Name:** N4-[2-(4-phenoxyphenyl)ethyl]-4,6-quinazolinediamine  
**Synonym:** CAY10470  
**MF:** C<sub>22</sub>H<sub>20</sub>N<sub>4</sub>O  
**FW:** 356.4  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid



### Laboratory Procedures

For long term storage, we suggest that QNZ be stored as supplied at -20°C. It should be stable for at least two years.

QNZ is supplied as a crystalline solid. A stock solution may be made by dissolving the QNZ in an organic solvent purged with an inert gas. QNZ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of QNZ in these solvents is 10, 20, and 30 mg/ml, respectively.

QNZ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, QNZ should first be dissolved in DMF and then diluted with the aqueous buffer of choice. QNZ has a solubility of 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Nuclear factor-κB (NF-κB) is an ubiquitous transcription factor that functions to enhance the transcription of pro-inflammatory cytokines like TNFα, Interleukin-1β, IL-6, and IL-8.<sup>1</sup> QNZ is an inhibitor of NF-κB activation with an IC<sub>50</sub> of 11 nM in human Jurkat cells. It also inhibits TNF-α production from lipopolysaccharide-stimulated mouse splenocytes with an IC<sub>50</sub> of 7 nM. QNZ showed efficacy *in vivo* by reducing edema formation in carrageenin-induced inflammation of rat hind paw.<sup>2</sup>

### References

1. Karin, M., Yamamoto, Y., and Wang, Q.M. The IKK NF-κB system: A treasure trove for drug development. *Nature Reviews Drug Discovery* **3**, 17-26 (2004).
2. Tobe, M., Isobe, Y., Tomizawa, H., *et al.* Discovery of quinazolines as a novel structural class of potent inhibitors of NF-κB activation. *Bioorg. Med. Chem.* **11**, 383-391 (2003).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10006734](http://www.caymanchem.com/catalog/10006734)

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**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

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