

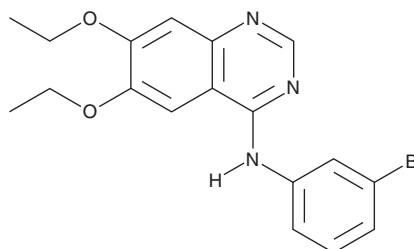
# PRODUCT INFORMATION



## Compound 56

Item No. 17254

**CAS Registry No.:** 171745-13-4  
**Formal Name:** N-(3-bromophenyl)-6,7-diethoxy-4-quinazolinamine  
**MF:** C<sub>18</sub>H<sub>18</sub>BrN<sub>3</sub>O<sub>2</sub>  
**FW:** 388.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 208, 230, 252, 333 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Compound 56 is supplied as a crystalline solid. A stock solution may be made by dissolving the compound 56 in the solvent of choice, which should be purged with an inert gas. Compound 56 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of compound 56 in these solvents is approximately 2 mg/ml.

Compound 56 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, compound 56 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Compound 56 has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Compound 56 is a highly potent inhibitor of the tyrosine kinase activity of the epidermal growth factor receptor (EGFR; IC<sub>50</sub> = 0.006 nM).<sup>1</sup> It has been used to inhibit EGFR activity in pancreatic cancer cell lines and to induce the differentiation of rat mesenchymal stem cells.<sup>2,3</sup>

### References

1. Bridges, A.J., Zhou, H., Cody, D.R., *et al.* Tyrosine kinase inhibitors. 8. An unusually steep structure-activity relationship for analogues of 4-(3-bromoanilino)-6,7-dimethoxyquinazoline (PD 153035), a potent inhibitor of the epidermal growth factor receptor. *J. Med. Chem.* **39**(1), 267-276 (1996).
2. Chandana, S.R., Leece, C.M., Gallo, K.A., *et al.* Inhibition of MLK3 decreases proliferation and increases antiproliferative activity of epidermal growth factor receptor (EGFR) inhibitor in pancreatic cancer cell lines. *Cancer Growth Metastasis* **3**, 1-9 (2010).
3. Hwang, K.C., Kim, J.Y., Chang, W., *et al.* Chemicals that modulate stem cell differentiation. *Proc. Natl. Acad. Sci. USA* **105**(21), 7467-7471 (2008).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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