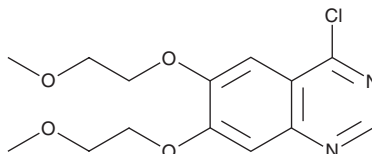


PRODUCT INFORMATION

4-Chloro-6,7-bis(2-methoxyethoxy)quinazoline

Item No. 30487

CAS Registry No.: 183322-18-1
 MF: $C_{14}H_{17}ClN_2O_4$
 FW: 312.8
 Purity: $\geq 95\%$
 UV/Vis.: λ_{max} : 222, 244 nm
 Supplied as: A crystalline solid
 Storage: $-20^{\circ}C$
 Stability: ≥ 4 years



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

Laboratory Procedures

4-Chloro-6,7-bis(2-methoxyethoxy)quinazoline is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-chloro-6,7-bis(2-methoxyethoxy)quinazoline in the solvent of choice, which should be purged with an inert gas. 4-Chloro-6,7-bis(2-methoxyethoxy)quinazoline is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 4-chloro-6,7-bis(2-methoxyethoxy)quinazoline in these solvents is 1, 10, and 30 mg/ml, respectively.

4-Chloro-6,7-bis(2-methoxyethoxy)quinazoline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4-chloro-6,7-bis(2-methoxyethoxy)quinazoline should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 4-Chloro-6,7-bis(2-methoxyethoxy)quinazoline has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

4-Chloro-6,7-bis(2-methoxyethoxy)quinazoline is a building block and synthetic intermediate.¹⁻⁵ It has been used as a precursor in the synthesis of receptor tyrosine kinase (RTK) inhibitors, dual RTK and histone deacetylase (HDAC) inhibitors, and anticancer compounds.¹⁻³ It is also a synthetic intermediate in the synthesis of EGFR inhibitors, including erlotinib (Item No. 10483), with antiproliferative activity.^{4,5}

References

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2. Li, W.W., Wang, X.Y., Zheng, R.L., *et al.* Discovery of the novel potent and selective FLT3 inhibitor 1-{5-[7-(3-morpholinopropoxy)quinazolin-4-ylthio]-[1,3,4]thiadiazol-2-yl}-3-*p*-tolylurea and its anti-acute myeloid leukemia (AML) activities *in vitro* and *in vivo*. *J. Med. Chem.* **55**(8), 3852-3866 (2012).
3. Zhang, X., Su, M., Chen, Y., *et al.* The design and synthesis of a new class of RTK/HDAC dual-targeted inhibitors. *Molecules* **18**(6), 6491-6503 (2013).
4. Liu, Z., Wang, L., Feng, M., *et al.* New acrylamide-substituted quinazoline derivatives with enhanced potency for the treatment of EGFR T790M-mutant non-small-cell lung cancers. *Bioorg. Chem.* **77**, 593-599 (2018).
5. Knesl, P., Rösling, D., and Jordis, U. Improved synthesis of substituted 6,7-dihydroxy-4-quinazolineamines: Tandutinib, erlotinib and gefitinib. *Molecules* **11**(4), 286-297 (2006).

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.

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