

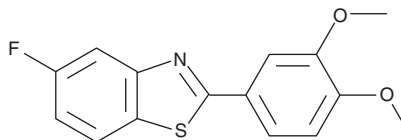
# PRODUCT INFORMATION



## GW 610

Item No. 10008313

**CAS Registry No.:** 872726-44-8  
**Formal Name:** 2-(3,4-dimethoxyphenyl)-5-fluorobenzothiazole  
**Synonym:** NSC 721648  
**MF:** C<sub>15</sub>H<sub>12</sub>FNO<sub>2</sub>S  
**FW:** 289.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 223, 324 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

GW 610 is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 610 in the solvent of choice, which should be purged with an inert gas. GW 610 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of GW 610 in these solvents is approximately 0.5 and 10 mg/ml, respectively.

GW 610 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GW 610 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. GW 610 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

GW 610 is an antitumor benzothiazole that shows growth-inhibitory activity against several cancer cell lines. In MCF-7 and MDA 468 human cancer cell lines, potent antiproliferative activity (growth inhibition (GI<sub>50</sub>) < 0.1 nM) was observed.<sup>1</sup> Potent and selective activity was also observed in the NCI 60 human cancer cell line panel. In contrast with previously reported 2-(4-aminophenyl)benzothiazoles, GW 610 is not reliant on induction of cytochrome P 1A1 (CYP1A1) expression for antitumor activity.

### Reference

1. Mortimer, C.G., Wells, G., Crochard, J.P., *et al.* Antitumor benzothiazoles. 26. 2-(3,4-Dimethoxyphenyl)-5-fluorobenzothiazole (GW 610, NSC 721648), a simple fluorinated 2-arylbenzothiazole, shows potent and selective inhibitory activity against lung, colon, and breast cancer cell lines. *J. Med. Chem.* **49**(1), 179-185 (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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM