

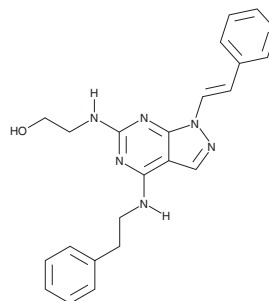
# PRODUCT INFORMATION



## SI-113

Item No. 37384

**CAS Registry No.:** 1392816-46-4  
**Formal Name:** 2-[[1-(2-phenylethyl)-4-[(2-phenylethyl)amino]-1H-pyrazolo[3,4-d]pyrimidin-6-yl]amino]-ethanol  
**MF:** C<sub>23</sub>H<sub>24</sub>N<sub>6</sub>O  
**FW:** 400.5  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 233, 270, 315 nm  
**Supplied as:** A 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

SI-113 is supplied as a solid. A stock solution may be made by dissolving the SI-113 in the solvent of choice, which should be purged with an inert gas. SI-113 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SI-113 in ethanol and DMF is approximately 30 mg/ml and approximately 15 mg/ml in DMSO.

### Description

SI-113 is a serum/glucocorticoid-regulated kinase 1 (SGK1) inhibitor (IC<sub>50</sub> = 600 nM).<sup>1</sup> It is selective for SGK1 over c-Src and Abl kinases at 12.5 μM.<sup>2</sup> SI-113 (12.5 μM) is cytotoxic to MCF-7 breast cancer, A172 glioblastoma multiforme, and RKO colorectal adenocarcinoma cell lines. *In vivo*, SI-113, in combination with paclitaxel, reduces tumor volume, tumor weight, and SGK1 protein levels in a patient-derived xenograft (PDX) mouse model of ovarian cancer when administered at a dose of 9.3 mg/kg.<sup>4</sup> SI-113 (100 μg/ml) is also active against *S. aureus* and *E. coli*.<sup>3</sup>

### References

1. Greco, C., Taresco, V., Pearce, A.K., *et al.* Development of pyrazolo[3,4-d]pyrimidine kinase inhibitors as potential clinical candidates for glioblastoma multiforme. *ACS Med. Chem. Lett.* **11(5)**, 657-663 (2020).
2. D'Antona, L., Amato, R., Talarico, C., *et al.* SI113, a specific inhibitor of the Sgk1 kinase activity that counteracts cancer cell proliferation. *Cell. Physiol. Biochem.* **35(5)**, 2006-2018 (2015).
3. Greco, C., Catania, R., Balcco, D.L., *et al.* Synthesis and antibacterial evaluation of new pyrazolo[3,4-d]pyrimidines kinase inhibitors. *Molecules* **25(22)**, 5354 (2020).
4. D'Antona, L., Dattilo, V., Catalogna, G., *et al.* In preclinical model of ovarian cancer, the SGK1 inhibitor SI113 counteracts the development of paclitaxel resistance and restores drug sensitivity. *Transl. Oncol.* **12(8)**, 1045-1055 (2019).

#### 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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