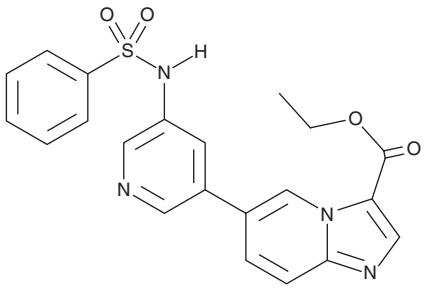
PRODUCT INFORMATION

HS-173

Item No. 19156

CAS Registry No.:	1276110-06-5
Formal Name:	6-[5-[(phenylsulfonyl)amino]-3-pyridinyl]-imidazo[1,2-a]pyridine-3-carboxylic acid, ethyl ester
MF:	$C_{21}H_{18}N_4O_4S$
FW:	422.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 246, 297 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

HS-173 is supplied as a crystalline solid. A stock solution may be made by dissolving the HS-173 in the solvent of choice, which should be purged with an inert gas. HS-173 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of HS-173 in ethanol is approximately 1 mg/ml and approximately 25 mg/ml in DMSO and DMF.

HS-173 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HS-173 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. HS-173 has a solubility of approximately 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.

Description

HS-173 is an imidazopyridine analog that acts as a PI3Kα inhibitor with an IC_{50} value of 0.8 nM.[1] It demonstrates antiproliferative activity in T47D, SK-BR-3, and MCF-7 cells with IC_{50} values of 0.6, 1.5, and 7.8 µM, respectively.[1] HS-173 is reported to induce apoptosis by arresting the cell cycle at the G_2/M phase and by activating caspases.[2,3] It has also been shown to block VEGF-induced angiogenesis both *in vitro* and *in vivo*.[2]

References

1. Kim, O., Jeong, Y., Lee, H., *et al.* Design and synthesis of imidazopyridine analogues as inhibitors of phosphoinositide 3-kinase signaling and angiogenesis. *J. Med. Chem.* **54(7)**, 2455-2466 (2011).
2. Lee, H., Jung, K.H., Jeong, Y., *et al.* HS-173, a novel phosphatidylinositol 3-kinase (PI3K) inhibitor, has anti-tumor activity through promoting apoptosis and inhibiting angiogenesis. *Cancer Lett.* **328(1)**, 152-159 (2013).
3. Son, M.K., Ryu, Y.-L., Jung, K.H., *et al.* HS-173, a novel PI3K inhibitor, attenuates the activation of hepatic stellate cells in liver fibrosis. *Sci. Rep.* **3:3470**, (2013).

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