

PRODUCT INFORMATION



SC-43

Item No. 34874

CAS Registry No.: 1400989-25-4
Formal Name: N-[4-chloro-3-(trifluoromethyl)phenyl]-
N'-[3-(4-cyanophenoxy)phenyl]-urea

MF: C₂₁H₁₃ClF₃N₃O₂

FW: 431.8

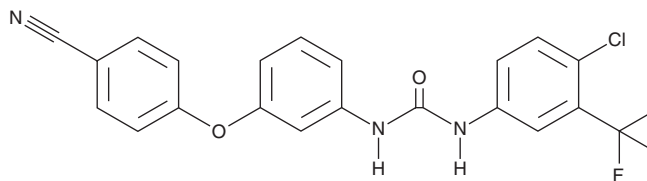
Purity: ≥98%

UV/Vis.: λ_{max}: 265 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

SC-43 is supplied as a solid. A stock solution may be made by dissolving the SC-43 in the solvent of choice, which should be purged with an inert gas. SC-43 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SC-43 in DMSO and DMF is approximately 30 mg/ml and approximately 15 mg/ml in ethanol.

Description

SC-43 is an activator of Src homology region 2 domain-containing phosphatase 1 (SHP-1).¹ It activates SHP-1 phosphatase activity in a cell-free assay and inhibits IL-6-induced phosphorylation of STAT3 in PLC/PRF/5 hepatocellular carcinoma cells when used at a concentration of 10 μM. SC-43 inhibits the proliferation of PLC/PRF/5 cells (IC₅₀ = 0.5 μM). It decreases disease severity and improves survival in a mouse model of carbon tetrachloride-induced liver fibrosis when administered at doses of 10 and 20 mg/kg.²

References

1. Chen, K.-F., Tai, W.-T., Hsu, C.-Y., *et al.* Blockade of STAT3 activation by sorafenib derivatives through enhancing SHP-1 phosphatase activity. *Eur. J. Med. Chem.* **55**, 220-227 (2012).
2. Su, T.-H., Shiau, C.-W., Jao, P., *et al.* Src-homology protein tyrosine phosphatase-1 agonist, SC-43, reduces liver fibrosis. *Sci. Rep.* **7**(1), 1728 (2017).

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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