PRODUCT INFORMATION



SR 9186

Item No. 13888

CAS Registry No.: 1361414-26-7

Formal Name: N-(4'-cyano[1,1'-biphenyl]-4-yl)-N'-

[4-(3H-imidazo[4,5-b]pyridin-7-yl)

phenyl]-urea

MF: $C_{26}H_{18}N_6O$ 430.5 FW: ≥95% **Purity:** 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

SR 9186 is supplied as a solid. A stock solution may be made by dissolving the SR 9186 in the solvent of choice, which should be purged with an inert gas. SR 9186 is soluble in DMSO and dimethyl formamide.

Description

SR 9186 is an inhibitor of the cytochrome P450 (CYP) isoform CYP3A4 (IC $_{50}$ = 0.011 $\mu\text{M}).^{1}$ It is highly selective for CYP3A4 over CYP3A5 (IC_{50} = 33 μ M). SR 9186 inhibits metabolism of midazolam to 1'-hydroxy midazolam, testosterone to 6 β -hydroxy testosterone, and vincristine to vincristine M1 in isolated human liver microsomes (HLMs) expressing recombinant CYP3A4 (IC_{50} s = 9, 4, and 38 nM, respectively) but not microsomes expressing recombinant CYP3A5.2 It decreases lapatinib-induced quinoneimine-glutathione adduct formation in HLMs by 78% when used at a concentration of 2.5 μ M.³

References

- 1. Song, X., Li, X., Ruiz, C.H., et al. Imidazopyridines as selective CYP3A4 inhibitors. Bioorg. Med. Chem. Lett. 22(4), 1611-1614 (2012).
- 2. Li, X., Song, X., Kamenecka, T.M., et al. Discovery of a highly selective CYP3A4 inhibitor suitable for reaction phenotyping studies and differentiation of CYP3A4 and CYP3A5. Drug Metab. Dispos. 40(9), 1803-1809 (2012).
- Towles, J.K., Clark, R.N., Wahlin, M.D., et al. Cytochrome P450 3A4 and CYP3A5-catalyzed bioactivation of lapatinib. Drug Metab. Dispos. 44(10), 1584-1597 (2016).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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