

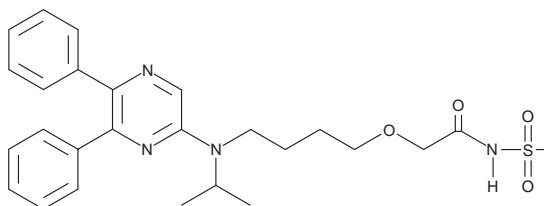
PRODUCT INFORMATION



NS 304

Item No. 10010411

CAS Registry No.: 475086-01-2
Formal Name: 2-[4-[(5,6-diphenylpyrazinyl)(1-methylethyl)amino]butoxy]-N-(methylsulfonyl)-acetamide
Synonyms: ACT-293987, Selexipag
MF: C₂₆H₃₂N₄O₄S
FW: 496.6
Purity: ≥98%
UV/Vis.: λ_{max}: 203, 231, 299, 366 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

NS 304 is supplied as a crystalline solid. A stock solution may be made by dissolving the NS 304 in the solvent of choice, which should be purged with an inert gas. NS 304 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of NS 304 in ethanol is approximately 50 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of NS 304 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of NS 304 in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Prostaglandin I₂ (PGI₂) is a potent vasorelaxant and inhibitor of human platelet aggregation that mediates its actions by binding to a specific G protein-coupled receptor, the IP receptor, on the surface of endothelial cells and platelets.¹ The IP receptor also participates in signal transduction of the pain response, cardioprotection, and inflammation.²⁻⁶ NS 304 is a prodrug of the active form of MRE-269, which is a potent and selective agonist for the human IP receptor with a K_i value of 20 nM.⁷ In contrast to PGI₂, which has a half-life of 30 seconds to a few minutes *in vivo*, NS 304 is long-acting. Plasma concentrations of MRE-269 remain near peak levels for more than eight hours in rats and dogs after NS 304 was administered orally.⁷

References

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5. Cui, Y., Kataoka, Y., Satoh, T., et al. *Biochem. Biophys. Res. Commun.* **265**, 301-304 (1999).
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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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