

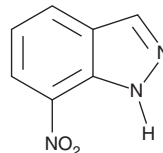
PRODUCT INFORMATION



7-Nitroindazole

Item No. 81340

CAS Registry No.: 2942-42-9
Formal Name: 7-nitro-1H-indazole
MF: $C_7H_5N_3O_2$
FW: 163.1
Purity: $\geq 99\%$
UV/Vis.: λ_{max} : 228, 300, 357 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

7-Nitroindazole is supplied as a crystalline solid. A stock solution may be made by dissolving the 7-nitroindazole in the solvent of choice, which should be purged with an inert gas. 7-Nitroindazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 7-nitroindazole in these solvents is approximately 2.7, 100, and 54 mg/ml, respectively.

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 7-nitroindazole can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 7-nitroindazole in PBS (pH 7.2) is approximately 50 $\mu\text{g/ml}$. We do not recommend storing the aqueous solution for more than one day.

Description

7-Nitroindazole is a non-selective inhibitor of nitric oxide synthase (NOS) isoforms *in vitro*. However, it shows good anti-nociceptive effects *in vivo* without affecting blood pressure via inhibition of eNOS.¹ The IC_{50} values for inhibition of rat nNOS, bovine eNOS, and rat iNOS are 0.71, 0.78, and 5.8 μM , respectively.^{2,3}

References

1. Moore, P.K., Babbedge, R.C., Wallace, P., *et al.* 7-Nitro indazole, an inhibitor of nitric oxide synthase, exhibits anti-nociceptive activity in the mouse without increasing blood pressure. *Br. J. Pharmacol.* **108**, 296-297 (1993).
2. Bland-Ward, P.A., Pitcher, A., Wallace, P., *et al.* Isoform selectivity of indazole-based nitric oxide synthase inhibitors. *Br. J. Pharmacol.* **112**, 351P (1994).
3. Babbedge, R.C., Bland-Ward, P.A., Hart, S.L., *et al.* Inhibition of rat cerebellar nitric oxide synthase by 7-nitro indazole and related substituted indazoles. *Br. J. Pharmacol.* **110**, 225-228 (1993).

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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