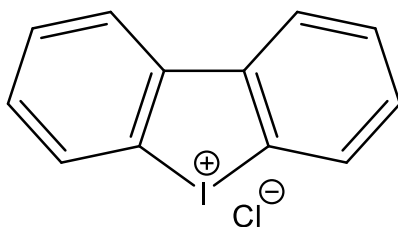


Catalog # 10-2668
Diphenyleneiodonium Cl

4673-26-1

DPI

Lot # X101471



An irreversible inhibitor of iNOS and eNOS (IC₅₀s=50 and 100 nM respectively).¹ Binds to and inhibits the flavoprotein of neutrophil NADPH oxidase.² Novel agonist for GPR3.³ Inhibits NFκB activation induced by IL-1β.⁴ Prevents early alcohol-induced liver injury in rodent models.⁵

- 1) Stuehr *et al.* (1991), *Inhibition of macrophage and endothelial cell nitric oxide synthase by diphenyleneiodonium and its analogs*; FASEB J., **5** 98
- 2) Yea *et al.* (1990), *Purification and some properties of the 45 kDa diphenylene iodonium-binding flavoprotein of neutrophil NADPH oxidase*; Biochem. J., **265** 95
- 3) Ye *et al.* (2014), *Identification of a novel small-molecule agonist for human G protein-coupled receptor 3*; J. Pharmacol. Exp. Ther., **349** 437
- 4) Mendes *et al.* (2001), *Diphenyleneiodonium inhibits NF-kappaB activation and iNOS expression induced by IL-1beta: involvement of reactive oxygen species*; Mediators Inflamm., **10** 209
- 5) Kono *et al.* (2001), *Diphenyleneiodonium sulfate, an NADPH oxidase inhibitor, prevents early alcohol-induced liver injury in the rat*; Am. J. Physiol. Gastrointest. Liver Physiol., **280** G1005

PHYSICAL DATA

Molecular Weight: 314.55
Molecular Formula: C₁₂H₈I · Cl
Purity: 98% by TLC
NMR: (Conforms)
Solubility: DMSO (up to 5 mg/ml with warming)
Physical Description: White solid
Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.