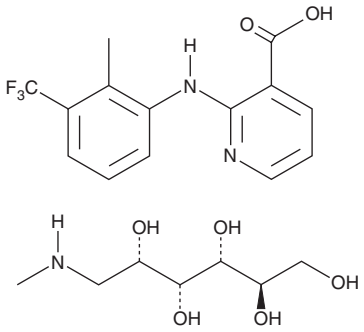
PRODUCT INFORMATION

Flunixin (meglumine)

Item No. 26644

CAS Registry No.:	42461-84-7
Formal Name:	1-deoxy-1-(methylamino)-D-glucitol, 2-[[2-methyl-3-(trifluoromethyl)phenyl] amino]-3-pyridinecarboxylate
Synonym:	NIH 10250
MF:	$C_{14}H_{11}F_3N_2O_2 \bullet C_7H_{17}NO_5$
FW:	491.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 279 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

Flunixin (meglumine) is supplied as a crystalline solid. A stock solution may be made by dissolving the flunixin (meglumine) in the solvent of choice. Flunixin (meglumine) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of flunixin (meglumine) in ethanol is approximately 0.25 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 flunixin (meglumine) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of flunixin (meglumine) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Flunixin is a non-steroidal anti-inflammatory drug (NSAID) that inhibits COX-1 and COX-2 (IC_{50}s = 3.24 and 0.55 µM, respectively).[1] It inhibits carrageenan-induced prostaglandin E_2 (PGE_2; Item No. 14010) and thromboxane B_2 (TXB_2; Item No. 19030) production in sheep exudate and serum, respectively, when administered at a dose of 1.1 mg/kg.[2] Flunixin (1.1 mg/l/kg) has anti-inflammatory, analgesic, and antipyretic activity in horses.[3] Formulations containing flunixin have been used in the veterinary treatment of pain and fever in livestock.

References

1. Bryant, C.E., Farnfield, B.A., and Janicke, H.J. Evaluation of the ability of carprofen and flunixin meglumine to inhibit activation of nuclear factor kappa B. *Am. J. Vet. Res.* **64(2)**, 211-215 (2003).
2. Cheng, Z., Nolan, A.M., and McKellar, Q.A. Measurement of cyclooxygenase inhibition in vivo: A study of two non-steroidal anti-inflammatory drugs in sheep. *Inflammation* **22(4)**, 353-366 (1998).
3. Houdeshell, J.W. and Hennessey, P.W. A new nonsteroidal, anti-inflammatory analgesic for horses. *J. Equine Vet Sci.* **1(2)**, 57-63 (1977).

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