



## **Diflunisal**

Catalog No: tcsc0007468

Available Sizes
Size: 25g
Size: 100g
<b>Size:</b> 500g
Specifications
<b>CAS No:</b> 22494-42-4
Formula: C <sub>13</sub> H <sub>8</sub> F <sub>2</sub> O <sub>3</sub>
Pathway: Immunology/Inflammation
<b>Target:</b> COX
Purity / Grade: >98%
<b>Solubility:</b> DMSO : 50 mg/mL (199.84 mM; Need ultrasonic)
<b>Alternative Names:</b> MK-647
<b>Observed Molecular Weight:</b> 250.2

## **Product Description**





Diflunisal (MK-647) is a salicylate derivative with nonsteroidal anti-inflammatory and uricosuric properties, which is used alone as an analgesic and in rheumatoid arthritis patients. The mechanism of action of diflunisal is as a Cyclooxygenase (**COX**) Inhibitor.

IC50 & Target: Target: Cyclooxygenase

In Vivo: Administration of increasing doses of Diflunisal to rats shows that the effect of the dose on the pharmacokinetics of Diflunisal is quite complicated. The plasma concentrations of Diflunisal decline exponentially with time, albeit with a half-life that increases with increasing dose. The  $CL_p$  is reduced considerably when the dose increases from 3 to 10 mg/kg and then remains relatively constant over the dose range of 10 to 60 mg/kg. Diflunisal has been shown to be highly bound to rat plasma protein and dependent on concentration. The fraction of unbound Diflunisal is increased about 10-fold over the concentration range of 5 to 300  $\mu$ g/mL<sup>[1]</sup>. Diflunisal exhibits activity after oral administration with potency about 25 times greater than that of aspirin, about 3 times that of glafenine and twice that of zomepirac<sup>[2]</sup>.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!