Flosulide

Cat. No.: HY-U00083
CAS No.: 80937-31-1
Molecular Formula: C₁₆H₁₃F₂NO₄S
Molecular Weight: 353.34
Target: COX
Pathway: Immunology/Inflammation
Storage: Please store the product under the recommended conditions in the Certificate of Analysis.

**BIOLOGICAL ACTIVITY**

<table>
<thead>
<tr>
<th>Description</th>
<th>Flosulide is a potent and selective COX-2 inhibitor, used for the treatment for inflammatory diseases.</th>
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<tbody>
<tr>
<td>IC₅₀ &amp; Target</td>
<td>COX-2</td>
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<td>In Vitro</td>
<td>Flosulide (1 nM-100 μM) causes a concentration-dependent and finally complete inhibition of PGE2 production in the OSC-2 cell line, but with no effect on PG formation in the OSC-1 cells. Flosulide completely suppresses mitotic activity of OSC-2 cells, whereas mitotic activity of OSC-1 cells remain unchanged[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</td>
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<tr>
<td>In Vivo</td>
<td>In normovolemic rats, flosulide increases renal plasma flow (RPF) and and glomerular filtration rate (GFR). In hypovolemic rats, flosulide (5-25 mg/kg) reduces RPF and GFR. Flosulide at 5 mg/kg reduces 6-keto-PGF1alpha whereas at 25 mg/kg and after indomethacin at 10 mg/kg a fall in 6-keto-PGF1alpha and TXB2 appears[1]. Flosulide (0.75 mg/day) significantly reduces proteinuria as compared to aspirin treatment. Plasma protein and albumin levels are significantly lower in the aspirin-treated group than in flosulide-treated rats[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</td>
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**PROTOCOL**

Cell Assay [2]

The proliferation of the esophageal tumor cell lines is determined using the cell proliferation kit II. Tumor cells are incubated with flosulide and NS-398 at different concentrations for 48 h in DMEM containing FCS (10%), penicillin (100 units/mL), and streptomycin (0.1 mg/mL). After this time, the XTT labeling mixture is added, followed by 4 h of incubation and measurement of absorbance at 490 nm. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**REFERENCES**
