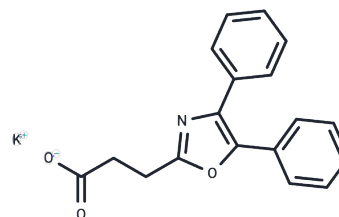


## Oxaprozin potassium

### Chemical Properties

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| CAS No. :         | 174064-08-5                                              |
| Formula:          | C <sub>18</sub> H <sub>14</sub> KNO <sub>3</sub>         |
| Molecular Weight: | 331.412                                                  |
| Appearance:       | no data available                                        |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year |



### Biological Description

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | Oxaprozin potassium is an orally active and potent inhibitor of COX, with IC <sub>50</sub> values of 2.2 μM and 36 μM for human platelet COX-1 and for IL-1-stimulated human synovial cell COX-2, respectively. Oxaprozin potassium induces cell apoptosis. Oxaprozin potassium also inhibits the NF-κB activation. Oxaprozin potassium-mediated inhibition of the Akt/IKK/NF-κB pathway contributes to its anti-inflammatory properties [1] [2].                                                                                                                                                                                                                  |
| In vitro    | Oxaprozin, across a concentration range of 0-100 μM, triggers apoptosis in a dose-dependent manner, with its most potent proapoptotic effect observed at 100 μM. This compound specifically elevates caspase-3 activity under activated conditions, while not affecting it in resting states. At a concentration of 50 μM, Oxaprozin effectively suppresses NF-κB activation and blocks the induction of the IKK system by IκBα. Furthermore, Oxaprozin significantly enhances apoptosis in CD40L-treated monocytes and abrogates CD40L-induced Akt and NF-κB (p65) phosphorylation, underscoring its potential in modulating inflammatory and apoptotic pathways. |

### Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 3.0174 mL | 15.0871 mL | 30.1741 mL |
| 5 mM  | 0.6035 mL | 3.0174 mL  | 6.0348 mL  |
| 10 mM | 0.3017 mL | 1.5087 mL  | 3.0174 mL  |
| 50 mM | 0.0603 mL | 0.3017 mL  | 0.6035 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

**This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use**

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 36 Washington Street, Wellesley Hills, MA 02481