Psoralidin

**Cat. No.:** HY-N0232  
**CAS No.:** 18642-23-4  
**Molecular Formula:** C_{20}H_{16}O_{5}  
**Molecular Weight:** 336.34  
**Target:** Notch  
**Pathway:** Stem Cell/Wnt  
**Storage:**  
- Powder: -20°C for 3 years, 4°C for 2 years  
- In solvent: -80°C for 6 months, -20°C for 1 month

### Solvent & Solubility

**In Vitro**  
10 mM in DMSO

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.9732 mL</td>
<td>14.8659 mL</td>
<td>29.7318 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5946 mL</td>
<td>2.9732 mL</td>
<td>5.9464 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2973 mL</td>
<td>1.4866 mL</td>
<td>2.9732 mL</td>
<td></td>
</tr>
</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

**Description**  
Psoralidin, a natural furanocoumarin, is isolated from Psoralea corylifolia L. possessing anti-cancer properties. IC50 value: Target: Anticancer natural compound in vitro: PSO dramatically decreased the cell viabilities in dose- and time-dependent manner. Autophagy inhibitor 3-MA blocked the production of LC3-II and reduced the cytotoxicity in response to PSO. Furthermore, PSO increased intracellular ROS level which was correlated to the elevation of LC3-II [1]. Psoralidin at 10 μM was able to induce the maximum reporter gene expression corresponding to that of E2-treated cells and such activation of the ERE-reporter gene by psoralidin was completely abolished by the cotreatment of a pure ER antagonist, implying that the biological activities of psoralidin are mediated by ER [2]. Psoralidin enhanced TRAIL-induced apoptosis in HeLa cells through increased expression of TRAIL-R2 death receptor and depolarization of mitochondrial membrane potential [3]. Psoralidin inhibited the IR-induced COX-2 expression and PGE(2) production through regulation of PI3K/Akt and NF-κB pathway. Also, psoralidin blocked IR-induced LTB(4) production, and it was due to direct interaction of psoralidin and 5-lipoxygenase activating protein (FLAP) in 5-LOX pathway. IR-induced fibroblast migration was notably attenuated in the presence of psoralidin [4]. in vivo: Moreover, in vivo results from mouse lung indicate that psoralidin suppresses IR-induced expression of pro-inflammatory cytokines (TNF-α, TGF-β, IL-6 and IL-1 α/β) and ICAM-1[4].
REFERENCES


