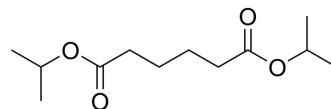


## Diisopropyl adipate

|                    |  |       |          |
|--------------------|--|-------|----------|
| Cat. No.:          | HY-134098  |       |          |
| CAS No.:           | 6938-94-9  |       |          |
| Molecular Formula: | C <sub>12</sub> H <sub>22</sub> O <sub>4</sub>       |       |          |
| Molecular Weight:  | 230.3  |       |          |
| Target:            | TRP Channel  |       |          |
| Pathway:           | Membrane Transporter/Ion Channel; Neuronal Signaling |       |          |
| Storage:           | Pure form  | -20°C | 3 years  |
|                    |  | 4°C   | 2 years  |
|                    | In solvent   | -80°C | 6 months |
|                    |  | -20°C | 1 month  |



### SOLVENT & SOLUBILITY

|   |   |                          |              |            |            |
|---|---|--------------------------|--------------|------------|------------|
| In Vitro  | DMSO : 100 mg/mL (434.22 mM; Need ultrasonic)   |                          |              |            |            |
|   |   | Solvent<br>Concentration | Mass<br>1 mg | 5 mg       | 10 mg      |
|   | Preparing<br>Stock Solutions  | 1 mM                     | 4.3422 mL    | 21.7108 mL | 43.4216 mL |
|   |   | 5 mM                     | 0.8684 mL    | 4.3422 mL  | 8.6843 mL  |
| 10 mM   |   | 0.4342 mL                | 2.1711 mL    | 4.3422 mL  |            |
| Please refer to the solubility information to select the appropriate solvent. |   |                          |              |            |            |
| In Vivo   | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline<br>Solubility: ≥ 2.5 mg/mL (10.86 mM); Clear solution |                          |              |            |            |
|   | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)<br>Solubility: ≥ 2.5 mg/mL (10.86 mM); Clear solution            |                          |              |            |            |
|   | 3. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 2.5 mg/mL (10.86 mM); Clear solution                            |                          |              |            |            |

### BIOLOGICAL ACTIVITY

|             |   |
|-------------|---|
| Description | <p>Diisopropyl adipate is an alternative plasticizer and a TRPA1 activator. Diisopropyl adipate activates TRPA1 and enhances FITC-induced contact hypersensitivity (CHS). Diisopropyl adipate also serves as an ingredient in cosmetics and drug formulations topically applied to the skin. Diisopropyl adipate can be used as an excipient, such as emollients, plasticizers. Pharmaceutical excipients, or pharmaceutical auxiliaries, refer to other chemical substances used in the pharmaceutical process other than pharmaceutical ingredients. Pharmaceutical excipients generally refer to inactive ingredients in pharmaceutical preparations, which can improve the stability, solubility and processability of pharmaceutical preparations. Pharmaceutical excipients also affect the absorption, distribution, metabolism, and elimination (ADME) processes of co-</p> |
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administered drugs<sup>[1][2]</sup>.

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## REFERENCES

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- [1]. Kurohane K, et al. Adjuvant Effect of an Alternative Plasticizer, Diisopropyl Adipate, on a Contact Hypersensitivity Mouse Model: Link with Sensory Ion Channel TRPA1 Activation. Biol Pharm Bull. 2015;38(7):1054-62.
- [2]. Elder DP, et al. Pharmaceutical excipients - quality, regulatory and biopharmaceutical considerations. Eur J Pharm Sci. 2016 May 25;87:88-99.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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