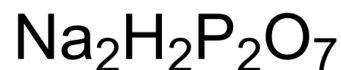


## Sodium pyrophosphate

|                    |  |
|--------------------|--|
| Cat. No.:          | HY-W105970   |
| CAS No.:           | 7758-16-9  |
| Molecular Formula: | $H_2Na_2O_7P_2$  |
| Molecular Weight:  | 221.94   |
| Target:            | Biochemical Assay Reagents   |
| Pathway:           | Others   |
| Storage:           | 4°C, sealed storage, away from moisture<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



### SOLVENT & SOLUBILITY

|   |   |   |      |           |            |            |
|---|---|---|------|-----------|------------|------------|
| In Vitro  | H <sub>2</sub> O : 100 mg/mL (450.57 mM; Need ultrasonic) |   |      |           |            |            |
|   | Preparing Stock Solutions                                 | <div><div>Solvent</div><div>Concentration</div></div> | Mass | 1 mg      | 5 mg       | 10 mg      |
|   |   |   |      |           |            |            |
|   |   | 1 mM  |      | 4.5057 mL | 22.5286 mL | 45.0572 mL |
|   |   | 5 mM  |      | 0.9011 mL | 4.5057 mL  | 9.0114 mL  |
|   |   | 10 mM   |      | 0.4506 mL | 2.2529 mL  | 4.5057 mL  |
| Please refer to the solubility information to select the appropriate solvent. |   |   |      |           |            |            |

### BIOLOGICAL ACTIVITY

|             |   |  |  |  |  |
|-------------|---|--|--|--|--|
| Description | Sodium pyrophosphate (Disodium pyrophosphate), a food additive, is an inorganic compound. Sodium pyrophosphate has potential hematotoxic and immunotoxic effects <sup>[1]</sup> . |  |  |  |  |
| In Vivo     | Disodium pyrophosphate (oral administration, 12.6 mg/kg) displays hematotoxic and immunotoxic effects with long-term exposure in rats <sup>[1]</sup> .                            |  |  |  |  |
|             | MCE has not independently confirmed the accuracy of these methods. They are for reference only.   |  |  |  |  |
|             | Animal Model:   | Adult Sprague-Dawley rats <sup>[1]</sup>   |  |  |  |
|             | Dosage:   | 12.6 mg/kg   |  |  |  |
|             | Administration:   | Oral administration  |  |  |  |
|             | Result:   | Displayed significant leukopenic condition.<br>Decreased in CD3 T-lymphocyte and CD20 Blymphocyte immunolabeling in rats.<br>Downregulated of PPAR-α and PPAR-γ together with upregulation of TNF-α. |  |  |  |

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## REFERENCES

[1]. Yasmina M Abd-Elhakim, et al. Effects of the food additives sodium acid pyrophosphate, sodium acetate, and citric acid on hemato-immunological pathological biomarkers in rats: Relation to PPAR- $\alpha$ , PPAR- $\gamma$  and tnfa signaling pathway. Environ Toxicol Pharmacol. 2018 Sep;62:98-106.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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