

## **Product** Data Sheet

## 2,3-Diphospho-D-glyceric acid pentasodium salt

Cat. No.: HY-138822 CAS No.: 102783-53-9 Molecular Formula:  $C_3H_3Na_5O_{10}P_2$ 

Molecular Weight: 375.95

Target: Others

Pathway: Others

Storage: -20°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

## **BIOLOGICAL ACTIVITY**

Description

2,3-Diphospho-D-glyceric acid pentasodium salt is a highly anionic polyphosphorus compound. 2,3-Diphospho-D-glyceric acid is present in the concave center of red blood cells, it binds hemoglobin to reduce its oxygen affinity. 2,3-Diphospho-D-glyceric acid is an endogenous, selective inhibitor of vascular calcification (VC) and significantly delays the formation of crystalline calpain particles (CPP). 2,3-Diphospho-D-glyceric acid also inhibits calcification in mouse vascular smooth muscle cell line (MOVAS) without cytotoxic effects<sup>[1]</sup>.

## **REFERENCES**

[1]. Kharaghani D, Kohno S, Minamizaki T, et al. 2, 3-Diphospho-D-glyceric acid inhibits calciprotein particle growth and calcification in MOVAS cells but not in MC3T3-E1 cells[J]. Colloid and Interface Science Communications, 2022, 50: 100668.

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

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