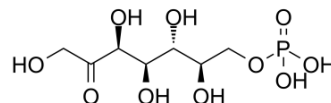


## D-Sedoheptulose 7-phosphate

<b>Cat. No.:</b>	HY-113206		
<b>CAS No.:</b>	2646-35-7		
<b>Molecular Formula:</b>	C <sub>7</sub> H <sub>15</sub> O <sub>10</sub> P		
<b>Molecular Weight:</b>	290.16		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	D-Sedoheptulose 7-phosphate is a common precursor for the heptoses of septacidin (group III) and hygromycin B (group IV). D-Sedoheptulose 7-phosphate can be converted to NDP-heptoses through similar biosynthetic pathways in those compounds <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite
<b>In Vitro</b>	<p>Sedoheptulose 7-phosphate can be converted to ADP-l-glycero-β-d-manno-heptose by SepB, SepL, and SepC, it involves in ADP-sugar in microbial natural product biosynthesis<sup>[1]</sup>.</p> <p>SepB is an S-7-P isomerase, SepL involves in the biosynthesis of heptoses of the core region of E. coli LPS, and they catalyze a four-reaction relay converting S-7-P into ADP-d-glycero-β-d-manno-heptose <sup>[1]</sup>.</p> <p>Septacidin and its analogs are potential anticancer and pain-relief agents<sup>[1]</sup>.</p> <p>Hygromycin B is an anthelmintic agent practically used in swine and poultry farming<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Tang W, et al. d-Sedoheptulose-7-phosphate is a common precursor for the heptoses of septacidin and hygromycin B. Proc Natl Acad Sci U S A. 2018 Mar 13;115(11):2818-2823.

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

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