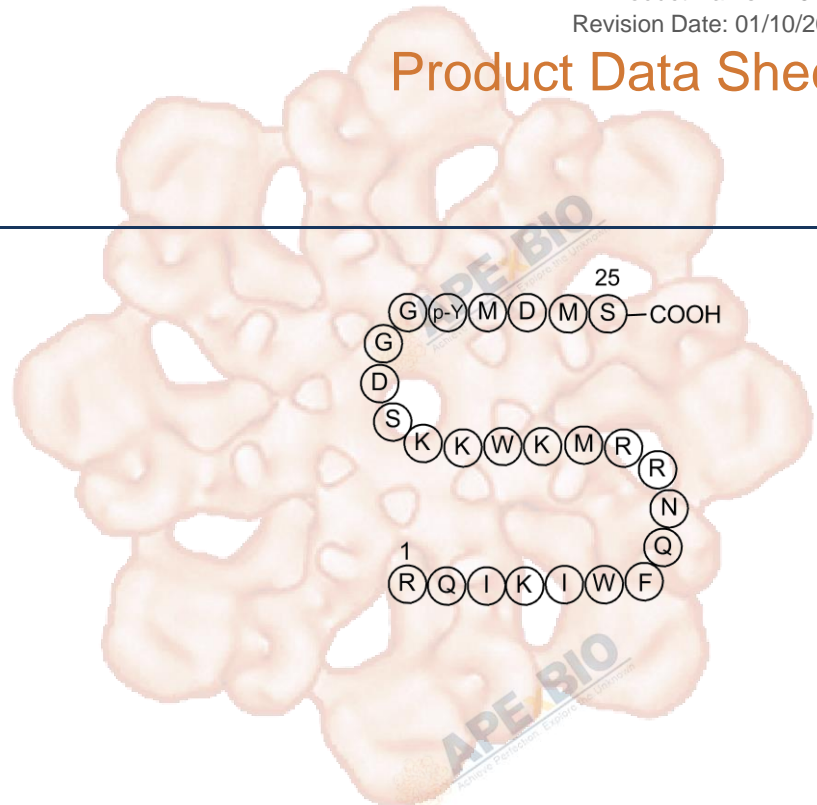


# Product Data Sheet

## 740 Y-P

<b>Cat. No.:</b>	B5246
<b>CAS No.:</b>	1236188-16-1
<b>Formula:</b>	C141H222N43O39PS3
<b>M.Wt:</b>	3270.72
<b>Synonyms:</b>	
<b>Target:</b>	PI3K/Akt/mTOR Signaling
<b>Pathway:</b>	PI3K
<b>Storage:</b>	Desiccate at -20°C



### Solvent & Solubility

≥163.54 mg/mL in DMSO; insoluble in EtOH; ≥4.87 mg/mL in H<sub>2</sub>O

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		0.3057 mL	1.5287 mL	3.0574 mL
	5 mM		0.0611 mL	0.3057 mL	0.6115 mL
	10 mM		0.0306 mL	0.1529 mL	0.3057 mL

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

### Biological Activity

Shortsummary

PI 3-kinase activator, cell permeable

IC<sub>50</sub> & Target

In Vitro

#### Cell Viability Assay

Cell Line:	Human melanoma MNT-1 cells
Preparation method:	Limited solubility. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	24 h

	Applications:	740 Y-P induces the generation of M6PR-positive puncta which is similar to the sucrose-induced vacuoles. 740 Y-P also prominently reduces the number of M6PR-positive vacuoles triggers by the sucrose treatment.
In Vivo	<b>Animal experiment</b>	
	Applications:	

## Product Citations

1. Chen Q, Tang L, et al. "Oxidative stress mediated by lipid metabolism contributes to highglucose-induced senescence in retinal pigment epithelium." *Free Radic Biol Med.* 2018 Oct 16;130:48-58.PMID:30339883
2. Wang X, Qi X, et al. "Autophagy Benefits the Replication of Egg Drop Syndrome Virus in Duck Embryo Fibroblasts." *Front Microbiol.* 2018 May 29;9:1091.PMID:29896171
3. Yang C, Hou A, et al. "Kanglaite reverses multidrug resistance of HCC by inducing apoptosis and cell cycle arrest via PI3K/AKT pathway." *Onco Targets Ther.* 2018 Feb 26;11:983-996.PMID:29520149
4. Shen Y, Wen L, et al. "Dihydrodiosgenin protects against experimental acute pancreatitis and associated lung injury through mitochondrial protection and PI3K/Akt inhibition." *Br J Pharmacol.* 2018 May;175(10):1621-1636.PMID:29457828
5. Zhang X, Zhao F, et al. "PDGF-mediated PI3K/AKT/ $\beta$ -catenin signaling regulates gap junctions in corpus cavernosum smooth muscle cells." *Exp Cell Res.* 2017 Nov 22. pii: S0014-4827(17)30627-4.PMID:29174980

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## References

1. Bin BH, Bhin J, Yang SH et al. Hyperosmotic stress reduces melanin production by altering melanosome formation. *PLoS One.* 2014 Aug 29;9(8):e105965.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*



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