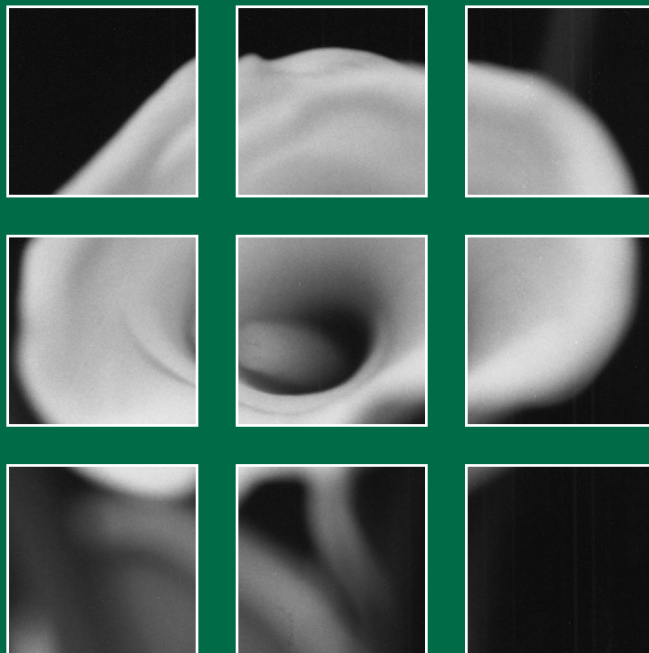


CELL SIGNALS

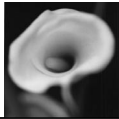


PRODUCT CATALOG



(Phone) 614-340-1845 | (Fax) 614-340-1846 | (Email) csignals@aol.com





ORDERING INFORMATION

PLACE ORDERS BY

Fax: (614) 340-1846, any time

Phone: (614) 340-1845, 8:30am to 5:00pm, U. S. Eastern Time

Email: csignals@aol.com, any time

PLEASE INCLUDE THE FOLLOWING INFORMATION IN YOUR ORDER

- Purchase order number
- Shipping & billing addresses
- Name and phone number of the contact person
- Catalog number
- Brief product description
- Packaging size & quantity

If ordering from outside the U.S., please include a VAT exemption letter or number if your institution is qualified for tax exemption. If receipt confirmation is desired, please include either your fax number or email address.

SHIPMENT

In most cases, orders will be shipped via FedEx Standard Overnight (U.S.) or FedEx International Priority (outside the U.S.) Service within 24 hours of the receipt of the order. For collect shipments, please provide FedEx or other carrier's account number.

CUSTOM SYNTHESIS, PACKAGING AND BULK PURCHASING

If a different size of package is requested, we will gladly work with you to meet your needs. Bulk quantities (>10 mg) are available with discount.

PAYMENT

Terms of sale are 30 days after the date of invoice. Payment can be made with check, credit card, or electronic wire transfer. CellSignals reserves the right to withhold any further shipments if there is past due balance.

USE OF PRODUCTS

All products sold by CellSignals are intended primarily for laboratory research conducted by trained professionals only. The products are not to be used for nutritional, diagnostic, or any medical purposes for humans or animals.



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CATALOG NUMBER	PRODUCT DESCRIPTION	SIZE (Mg)			PAGE NUMBER
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105	PI(3,4)P ₂ -biotin, Na ⁺	\$200	\$400	Inquire	
107	PI(3,4,5)P ₃ -biotin, Na ⁺	\$200	\$400	Inquire	
909	PI(3)P, diC8, H ⁺	\$85	\$170	\$320	7
910	PI(3)P, diC16, H ⁺	\$80	\$160	\$300	
210	PI(3)P, diC16, Na ⁺	\$80	\$160	\$300	
911	PI(4)P, diC8, H ⁺	\$85	\$170	\$320	8
912	PI(4)P, diC16, H ⁺	—	—	\$100	
212	PI(4)P, diC16, Na ⁺	—	—	\$100	
913	PI(5)P, diC8, H ⁺	\$85	\$170	\$320	9
914	PI(5)P, diC16, H ⁺	\$80	\$160	\$300	
214	PI(5)P, diC16, Na ⁺	\$80	\$160	\$300	
901	PI(4,5)P ₂ , diC8, H ⁺	—	\$120	\$220	10
902	PI(4,5)P ₂ , diC16, H ⁺	—	\$110	\$200	
202	PI(4,5)P ₂ , diC16, Na ⁺	—	\$110	\$200	
903	PI(3,4)P ₂ , diC8, H ⁺	\$150	\$280	\$400	11
904	PI(3,4)P ₂ , diC16, H ⁺	\$95	\$190	\$340	
204	PI(3,4)P ₂ , diC16, Na ⁺	\$95	\$190	\$340	
905	PI(3,5)P ₂ , diC8, H ⁺	\$150	\$280	\$400	12
906	PI(3,5)P ₂ , diC16, H ⁺	\$140	\$260	\$380	
206	PI(3,5)P ₂ , diC16, Na ⁺	\$140	\$260	\$380	



CATALOG NUMBER	PRODUCT DESCRIPTION	SIZE (Mg)			PAGE NUMBER
		<u>0.2</u>	<u>0.5</u>	<u>1.0</u>	
907	PI(3,4,5)P ₃ , diC8, H ⁺	\$150	\$280	\$400	13
207	PI(3,4,5)P ₃ , diC8, Na ⁺	\$140	\$260	\$380	
908	PI(3,4,5)P ₃ , diC16, H ⁺	\$140	\$260	\$380	
208	PI(3,4,5)P ₃ , diC16, Na ⁺	\$140	\$260	\$380	
004	Ins(1,3)P ₂ , Na ⁺	—	\$140	\$250	14
915	Ins(1,4)P ₂ , K ⁺	—	\$150	\$280	
220	Ins(1,5)P ₂ , Na ⁺	—	\$150	\$280	
916	Ins(4,5)P ₂ , K ⁺	—	\$150	\$280	
503	Ins(1,3,4)P ₃ , K ⁺	—	\$160	\$300	15
502	Ins(1,4,5)P ₃ , K ⁺	—	—	\$70	
805	Ins(1,5,6)P ₃ , K ⁺	\$100	\$200	\$360	
917	Ins(2,4,5)P ₃ , K ⁺	\$100	\$200	\$360	
501	Ins(1,3,4,5)P ₄ , K ⁺	—	\$160	\$300	16
919	Ins(1,3,4,5)P ₄ , NH ₄ ⁺	—	\$160	\$300	
803	Ins(1,3,4,6)P ₄ , K ⁺	\$100	\$200	\$360	
802	Ins(1,2,5,6)P ₄ , K ⁺	\$100	\$200	\$360	
804	Ins(1,4,5,6)P ₄ , K ⁺	\$100	\$200	\$360	17
920	Ins(1,4,5,6)P ₄ , NH ₄ ⁺	\$100	\$200	\$360	
801	Ins(3,4,5,6)P ₄ , K ⁺	\$100	\$200	\$360	
806	Ins(1,3,4,5,6) ₅ , K ⁺	—	\$150	\$280	
300	Sampler kit: any combination of at least five products, any size: 5% off total price				

H⁺: Protonated (free acid) form; Na⁺: Sodium salt form; K⁺: Potassium salt form; NH₄⁺: Ammonium salt form.

DiC16: Both of the fatty acyl side chains are palmitoyl (C₁₅H₃₁CO-)

DiC8: Both of the fatty acyl side chains are octanoyl (C₇H₁₅CO-)



103

PI(4,5)P₂-Biotin; PtdIns(4,5)P₂-Biotin

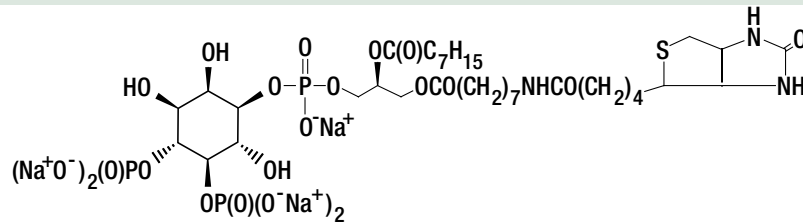
Biotinylated L- α -D-*myo*-Phosphatidylinositol 4,5-bisphosphate

Synthetic, sodium salt; lyophilized powder

C₃₅H₅₉O₂₁P₃N₃S₁Na₅; MW 1097

\$200/0.2 mg

\$400/0.5 mg



105

PI(3,4)P₂-Biotin; PtdIns(3,4)P₂-Biotin

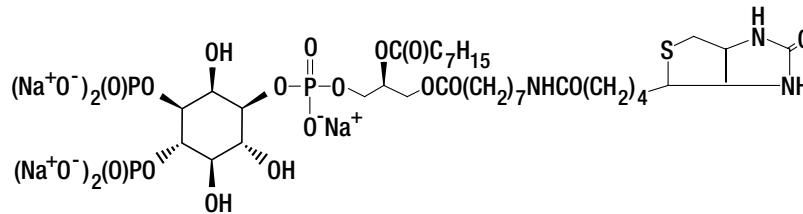
Biotinylated L- α -D-*myo*-Phosphatidylinositol 3,4-bisphosphate

Synthetic, sodium salt; lyophilized powder

C₃₅H₅₉O₂₁P₃N₃S₁Na₅; MW 1097

\$200/0.2 mg

\$400/0.5 mg



107

PI(3,4,5)P₃-Biotin; PtdIns(3,4,5)P₃-Biotin

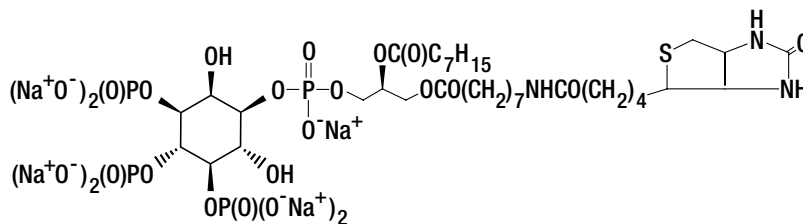
Biotinylated L- α -D-*myo*-Phosphatidylinositol 3,4,5-trisphosphate

Synthetic, sodium salt; lyophilized powder

C₃₅H₅₈O₂₄P₄N₃S₁Na₇; MW 1221

\$200/0.2 mg

\$400/0.5 mg





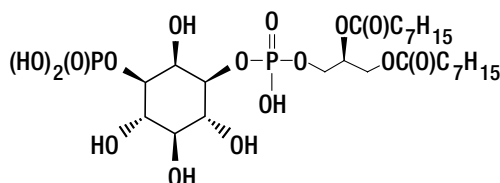
909

PI(3)P; PtdIns(3)P (diC8)

L- α -D-*myo*-Phosphatidylinositol 3-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-octanoylglycerol

Synthetic, free acid; lyophilized powder; $C_{25}H_{48}O_{16}P_2$; FW 666

\$85/0.2mg
\$170/0.5 mg
\$320/mg



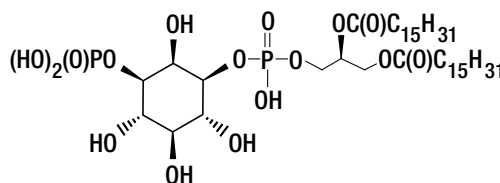
910

PI(3)P; PtdIns(3)P (diC16)

L- α -D-*myo*-Phosphatidylinositol 3-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, free acid; lyophilized powder; $C_{41}H_{80}O_{16}P_2$; FW 890

\$80/0.2mg
\$160/0.5 mg
\$300/mg



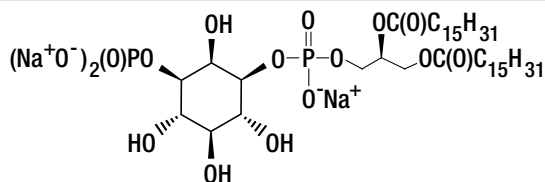
210

PI(3)P- Na^+ ; PtdIns(3)P- Na^+ (diC16)

L- α -D-*myo*-Phosphatidylinositol 3-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, sodium salt; lyophilized powder; $C_{41}H_{77}O_{16}P_2Na_3$; FW 956

\$80/0.2mg
\$160/0.5 mg
\$300/mg



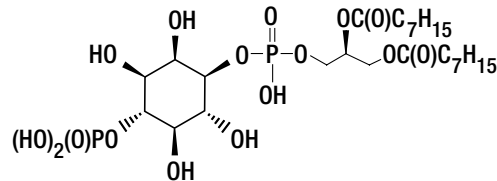


911

PI(4)P; PtdIns(4)P (diC8)

L- α -D-*myo*-Phosphatidylinositol 4-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-octanoylglycerol
Synthetic, free acid; lyophilized powder; $C_{25}H_{48}O_{16}P_2$; FW 666

\$85/0.2mg
\$170/0.5 mg
\$320/mg

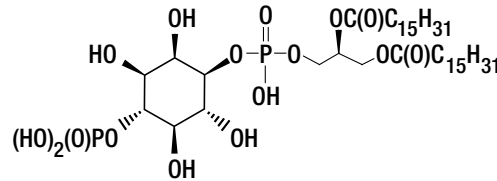


912

PI(4)P; PtdIns(4)P (diC16)

L- α -D-*myo*-Phosphatidylinositol 4-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol
Synthetic, free acid; lyophilized powder; $C_{41}H_{80}O_{16}P_2$; FW 890

\$100/mg

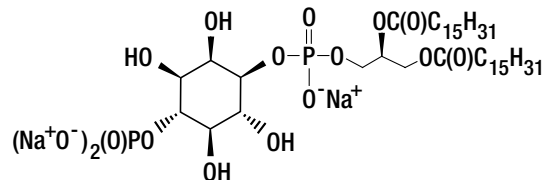


212

PI(4)P-Na⁺; PtdIns(4)P-Na⁺ (diC16)

L- α -D-*myo*-Phosphatidylinositol 4-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol
Synthetic, sodium salt; lyophilized powder; $C_{41}H_{77}O_{16}P_2Na_3$; FW 956

\$100/mg



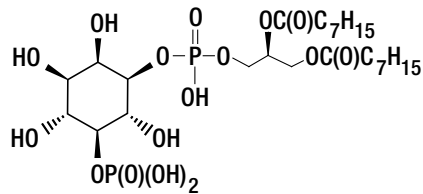


913

PI(5)P; PtdIns(5)P (diC8)

L- α -D-*myo*-Phosphatidylinositol 5-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-octanoylglycerol
Synthetic, free acid; lyophilized powder; $C_{25}H_{48}O_{16}P_2$; FW 666

\$85/0.2mg
\$170/0.5 mg
\$320/mg

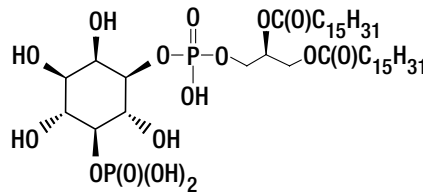


914

PI(5)P; PtdIns(5)P (diC16)

L- α -D-*myo*-Phosphatidylinositol 5-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol
Synthetic, free acid; lyophilized powder; $C_{41}H_{80}O_{16}P_2$; FW 890

\$80/0.2mg
\$160/0.5 mg
\$300/mg

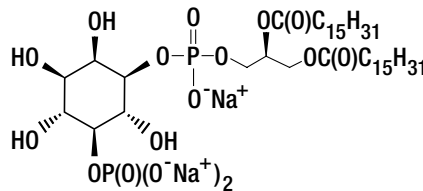


214

PI(5)P- Na^+ ; PtdIns(5)P- Na^+ (diC16)

L- α -D-*myo*-Phosphatidylinositol, 5-monophosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol
Synthetic, sodium salt; lyophilized powder; $C_{41}H_{77}O_{16}P_2Na_3$; FW 956

\$80/0.2mg
\$160/0.5 mg
\$300/mg





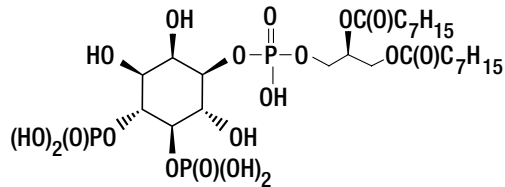
901

PI(4,5)P₂; PtdIns(4,5)P₂ (diC8)

L- α -D-*myo*-Phosphatidylinositol 4,5-bisphosphate, 3-O-phospho linked, D(+)-sn-1,2-di-O-octanoylglycerol

Synthetic, free acid; lyophilized powder; C₂₅H₄₉O₁₉P₃; FW 746

\$120/0.5 mg
\$220/mg



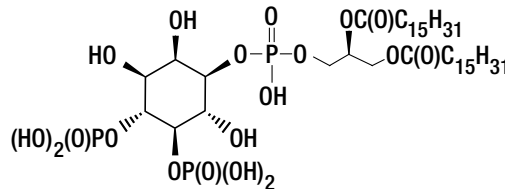
902

PI(4,5)P₂; PtdIns(4,5)P₂ (diC16)

L- α -D-*myo*-Phosphatidylinositol 4,5-bisphosphate, 3-O-phospho linked, D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, free acid; lyophilized powder; C₄₁H₈₁O₁₉P₃; FW 970

\$110/0.5 mg
\$200/mg



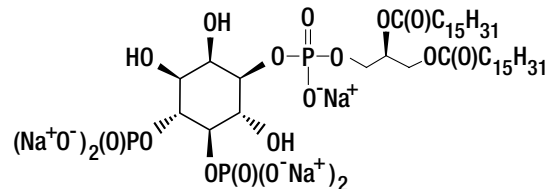
202

PI(4,5)P₂-Na⁺; PtdIns(4,5)P₂-Na⁺ (diC16)

L- α -D-*myo*-Phosphatidylinositol 4,5-bisphosphate, 3-O-phospho linked, D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, sodium salt; lyophilized powder; C₄₁H₇₆O₁₉P₃Na₅; FW 1080

\$110/0.5 mg
\$200/mg





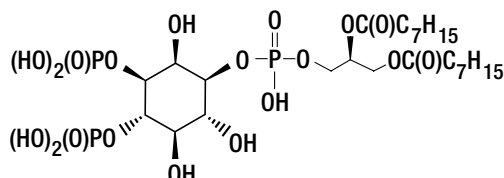
903

PI(3,4)P₂; PtdIns(3,4)P₂ (diC8)

L- α -D-*myo*-Phosphatidylinositol 3,4-bisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-octanoylglycerol

Synthetic, free acid; lyophilized powder; C₂₅H₄₉O₁₉P₃; FW 746

\$150/0.2 mg
\$280/0.5 mg
\$400/mg



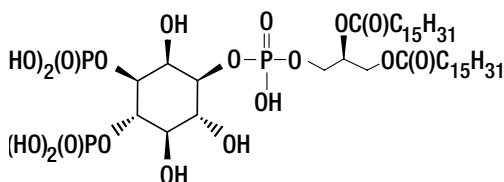
904

PI(3,4)P₂; PtdIns(3,4)P₂ (diC16)

L- α -D-*myo*-Phosphatidylinositol 3,4-bisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, free acid; lyophilized powder; C₄₁H₈₁O₁₉P₃; FW 970

\$95/0.2 mg
\$190/0.5 mg
\$340/mg



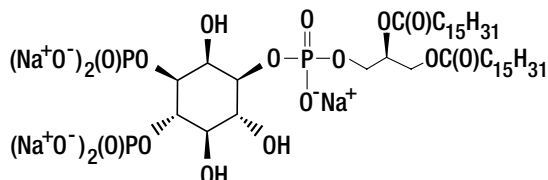
204

PI(3,4)P₂-Na⁺; PtdIns(3,4)P₂-Na⁺ (diC16)

L- α -D-*myo*-Phosphatidylinositol 3,4-bisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, free acid; lyophilized powder; C₄₁H₇₆O₁₉P₃Na₅; FW 1080

\$95/0.2 mg
\$190/0.5 mg
\$340/mg





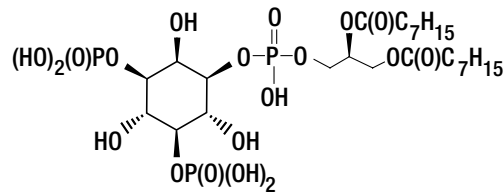
905

PI(3,5)P₂; PtdIns(3,5)P₂ (diC8)

L- α -D-*myo*-Phosphatidylinositol 3,5-bisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-octanoylglycerol

Synthetic, free acid; lyophilized powder; C₂₅H₄₉O₁₉P₃; FW 746

\$150/0.2 mg
\$280/0.5 mg
\$400/mg



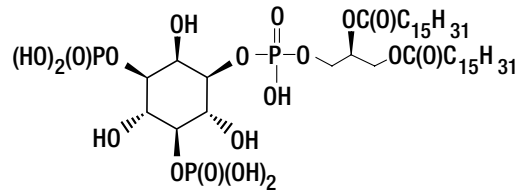
906

PI(3,5)P₂; PtdIns(3,5)P₂ (diC16)

L- α -D-*myo*-Phosphatidylinositol 3,5-bisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, free acid; lyophilized powder; C₄₁H₈₁O₁₉P₃; FW 970

\$140/0.2 mg
\$260/0.5 mg
\$380/mg



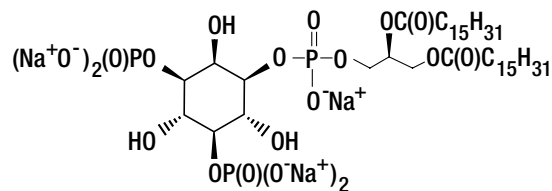
206

PI(3,5)P₂-Na⁺; PtdIns(3,5)P₂-Na⁺ (diC16)

L- α -D-*myo*-Phosphatidylinositol 3,5-bisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglycerol

Synthetic, sodium salt; lyophilized powder; C₄₁H₇₆O₁₉P₃Na₅; FW 1080

\$140/0.2 mg
\$260/0.5 mg
\$380/mg



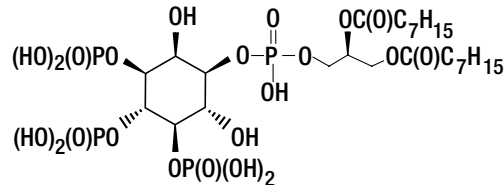


907

PI(3,4,5)P₃; PtdIns(3,4,5)P₃ (diC8)

L- α -D-*myo*-Phosphatidylinositol 3,4,5-trisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-octanoylglyceryl
Synthetic, free acid; lyophilized powder; C₂₅H₅₀O₂₂P₄; FW 826

\$150/0.2 mg
\$280/0.5 mg
\$400/mg

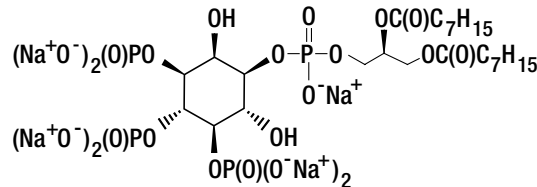


207

PI(3,4,5)P₃-Na⁺; PtdIns(3,4,5)P₃-Na⁺ (diC8)

L- α -D-*myo*-Phosphatidylinositol 3,4,5-trisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-octanoylglyceryl
Synthetic, sodium salt; lyophilized powder; C₂₅H₄₃O₂₂P₄Na₇; FW 980

\$140/0.2 mg
\$260/0.5 mg
\$380/mg

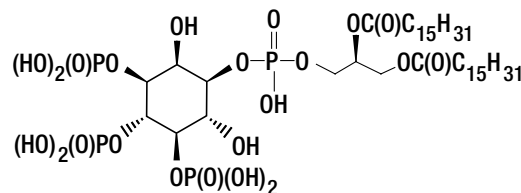


908

PI(3,4,5)P₃; PtdIns(3,4,5)P₃ (diC16)

L- α -D-*myo*-Phosphatidylinositol 3,4,5-trisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglyceryl
Synthetic, free acid; lyophilized powder; C₄₁H₈₂O₂₂P₄; FW 1050

\$140/0.2 mg
\$260/0.5 mg
\$380/mg

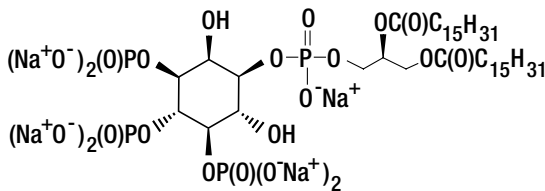


208

PI(3,4,5)P₃-Na⁺; PtdIns(3,4,5)P₃-Na⁺ (diC16)

L- α -D-*myo*-Phosphatidylinositol 3,4,5-trisphosphate, 3-O-phospho linked,
D(+)-sn-1,2-di-O-hexadecanoylglyceryl
Synthetic, sodium salt; lyophilized powder; C₄₁H₇₅O₂₂P₄Na₇; FW 1204

\$140/0.2 mg
\$260/0.5 mg
\$380/mg



300

Sampler kit: any combination of at least five products, any size; 5% off total price



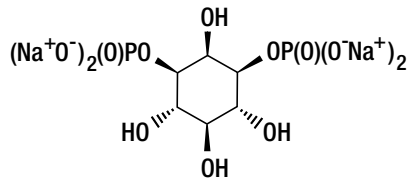
004

Ins(1,3)P₂
Myo-Inositol 1,3-bisphosphate

Synthetic, sodium salt; lyophilized powder

C₆H₁₀O₁₂P₂Na₄; FW 428

\$140/0.5 mg
\$250/mg



915

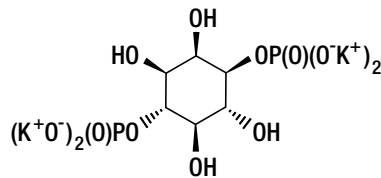
Ins(1,4)P₂

D-*myo*-Inositol 1,4-bisphosphate

Synthetic, potassium salt; lyophilized powder

C₆H₁₀O₁₂P₂K₄; FW 492

\$150/0.5 mg
\$280/mg



220

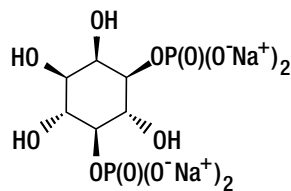
Ins(1,5)P₂

D-*myo*-Inositol 1,5-bisphosphate

Synthetic, sodium salt; lyophilized powder

C₆H₁₀O₁₂P₂Na₄; FW 428

\$150/0.5 mg
\$280/mg



916

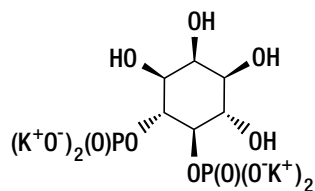
Ins(4,5)P₂

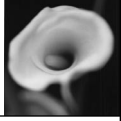
D-*myo*-Inositol 4,5-bisphosphate

Synthetic, potassium salt; lyophilized powder

C₆H₁₀O₁₂P₂K₄; FW 492

\$150/0.5 mg
\$280/mg





503

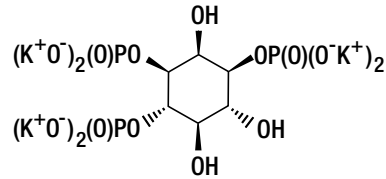
Ins(1,3,4)P₃

D-*myo*-Inositol 1,3,4-trisphosphate

Synthetic, potassium salt; lyophilized powder

C₆H₉O₁₅P₃K₆; FW 648

\$160/0.5 mg
\$300/mg



502

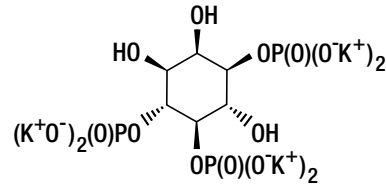
Ins(1,4,5)P₃

D-*myo*-Inositol 1,4,5-trisphosphate

Synthetic, potassium salt; lyophilized powder

C₆H₉O₁₅P₃K₆; FW 648

\$70/mg



805

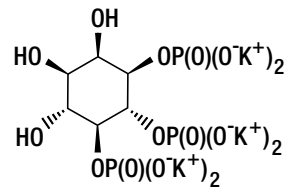
Ins(1,5,6)P₃

D-*myo*-Inositol 1,5,6-trisphosphate

Synthetic, potassium salt; lyophilized powder

C₆H₉O₁₅P₃K₆; FW 648

\$100/0.2 mg
\$200/0.5 mg
\$360/mg



917

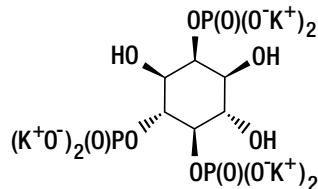
Ins(2,4,5)P₃

D-*myo*-Inositol 2,4,5-trisphosphate

Synthetic, potassium salt; lyophilized powder

C₆H₉O₁₅P₃K₆; FW 648

\$100/0.2 mg
\$200/0.5 mg
\$360/mg



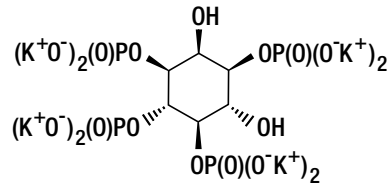


501

Ins(1,3,4,5)P₄

D-*myo*-Inositol 1,3,4,5-tetrakisphosphate
Synthetic, potassium salt; lyophilized powder
C₆H₈O₁₈P₄K₈; FW 804

\$160/0.5 mg
\$300/mg

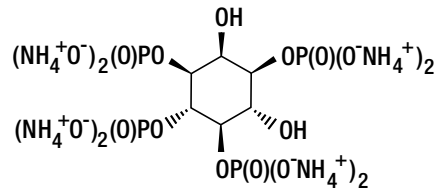


919

Ins(1,3,4,5)P₄

D-*myo*-Inositol 1,3,4,5-tetrakisphosphate
Synthetic, ammonium salt; lyophilized powder
C₆H₄₀O₁₈P₄N₈; FW 636

\$160/0.5 mg
\$300/mg

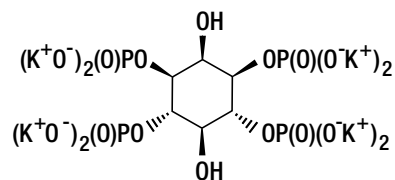


803

Ins(1,3,4,6)P₄

Myo-Inositol 1,3,4,6-tetrakisphosphate
Synthetic, potassium salt; lyophilized powder
C₆H₈O₁₈P₄K₈; FW 804

\$100/0.2 mg
\$200/0.5 mg
\$360/mg

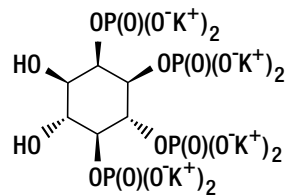


802

Ins(1,2,5,6)P₄

D-*myo*-Inositol 1,2,5,6-tetrakisphosphate
Synthetic, potassium salt; lyophilized powder
C₆H₈O₁₈P₄K₈; FW 804

\$100/0.2 mg
\$200/0.5 mg
\$360/mg



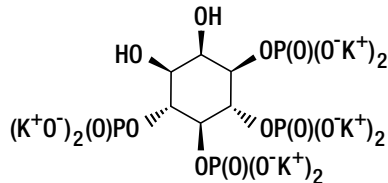


804

Ins(1,4,5,6)P₄

D-*myo*-Inositol 1,4,5,6-tetrakisphosphate
Synthetic, potassium salt; lyophilized powder
C₆H₈O₁₈P₄K₈; FW 804

\$100/0.2 mg
\$200/0.5 mg
\$360/mg

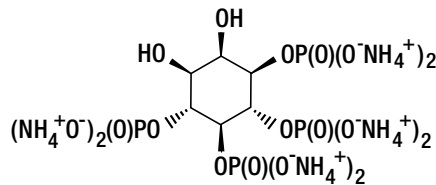


920

Ins(1,4,5,6)P₄

D-*myo*-Inositol 1,4,5,6-tetrakisphosphate
Synthetic, ammonium salt; lyophilized powder
C₆H₄₀O₁₈P₄N₈; FW 636

\$100/0.2 mg
\$200/0.5 mg
\$360/mg

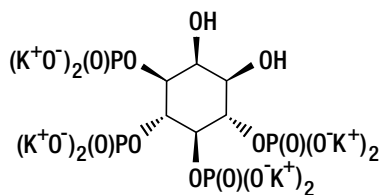


801

Ins(3,4,5,6)P₄

D-*myo*-Inositol 3,4,5,6-tetrakisphosphate
Synthetic, potassium salt; lyophilized powder
C₆H₈O₁₈P₄K₈; FW 804

\$100/0.2 mg
\$200/0.5 mg
\$360/mg

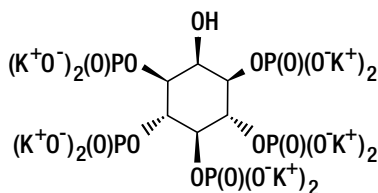


806

Ins(1,3,4,5,6)P₅

Myo-Inositol 1,3,4,5,6-pentakisphosphate
Synthetic, potassium salt; lyophilized powder
C₆H₇O₂₁P₅K₁₀; FW 960

\$150/0.5mg
\$280



300

Sampler kit: any combination of at least five products, any size; 5% off total price



PRODUCT INFORMATION

L- α -D-*myo*-Phosphatidylinositol polyphosphates (PIP; PtdIns)

- Lyophilized white powder; synthetic; purity >98%
- DiC8: with octanoyl fatty acyl side chains at C1 and C2
- DiC16: with palmitoyl fatty acyl side chains at C1 and C2
- Hygroscopic; stable in dry state; storage at -20°C is highly recommended.
- For free acid: PIP with octanoyl side chains (diC8) are soluble in aqueous media, while PIP with palmitoyl side chains (diC16) are soluble in organic solvents such as chloroform, ethanol, DMSO. These water-insoluble PIP can be brought into buffered aqueous media as lipid vesicles by brief sonication.
- For sodium salt of PIP: PIP with trisphosphate and bisphosphate are soluble in aqueous media whereas PIP with monophosphate are only partially soluble in aqueous media. It can be made into lipid vesicles by brief sonication, or by dissolving in DMF or DMSO.

Biotinylated L- α -D-*myo*-Phosphatidylinositol polyphosphates (PIP-Biotin; PtdIns-Biotin)

- Lyophilized white powder; synthetic; sodium salts; purity >95%
- All are water-soluble.
- Hygroscopic; stable in dry state; storage at -20°C is highly recommended.

D-*myo*-Inositol polyphosphates (IP; InsP)

- Lyophilized granules; synthetic; purity >98%
- Very hygroscopic; water soluble; stable; storage at -20°C is highly recommended.



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