

Synthetic oligonucleotides are purchased from IDT, Integrated DNA Technologies, Inc <https://www.idtdna.com/pages>

Primers

✓You will be ordering the six LAMP primers listed in the table below.

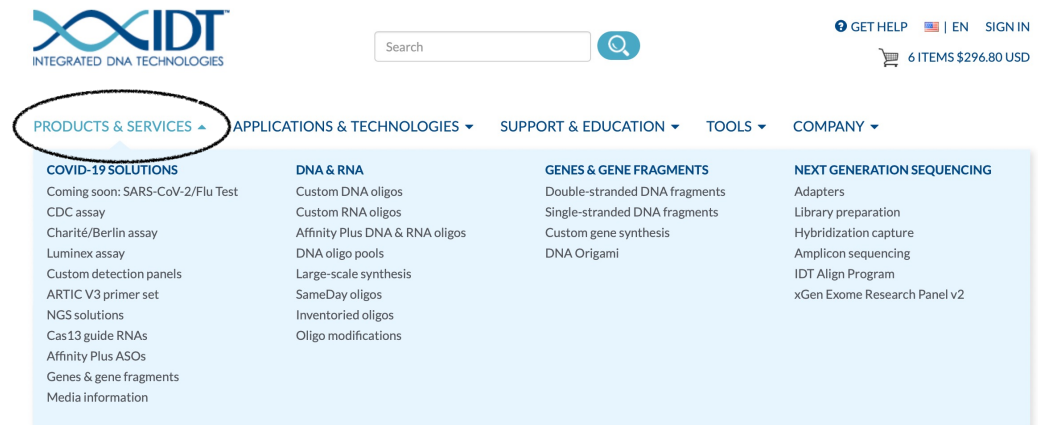
✓Download an Excel spreadsheet with this information from the 'Resources' section of the [UCCE-Napa LAMP assay website](#).

Name	Sequence	Scale	Purification
p1825, LAMP.168-F3	GAATCGTTTGAATCGTAAGAGA	250 nmole DNA Oligo	Standard Desalting
p1826, LAMP.168-B3	CAGACAAATAAATACGATTCCTTTC	250 nmole DNA Oligo	Standard Desalting
p1827, LAMP.168-FIP	AATGACTCCTGCGGCTTCTTCGTATTTGGGTTCAAGA	1 umole DNA Oligo	Standard Desalting
p1828, LAMP.168-BIP	TCAAAGACGTCGTCTGTTGTCATTCACGTCCTCCACC	1 umole DNA Oligo	Standard Desalting
p1842, LAMP.168-LB	GCITTTAAAAACGACGTGT	250 nmole DNA Oligo	Standard Desalting
p1857, LAMP.168-LF	TTCACGCCAACACAAGT	250 nmole DNA Oligo	Standard Desalting

STEP 1

✓Go to the IDT DNA technologies page

✓Under the Products and Services Tab, Click on Custom DNA Oligos



STEP 2

✓Under Custom DNA oligos, select
“Order Now” and “Order in tubes”



Custom DNA oligos

IDT's long-standing reputation as a pioneer and leader in custom oligo manufacturing is primarily due to our proprietary: our manufacturing process are designed and developed in-house, including specialized synthesizers that accommodate high-throughput automation systems that ensure fast turnaround times. We do not rely on third-party manufacturers for used for synthesis, allowing us to easily refine equipment and reagents as necessary. Our ability to control these variable unmatched in quality and consistency for use in routine and specialized applications.

DNA oligos »

Single-stranded, pooled, or duplexed DNA, synthesized to your specifications. Import multiple sequences from an Excel file or individually using our convenient online tools.

ORDER NOW ▾

Order in tubes

All ordering options

STEP 3

✓The Oligo Entry form will pop up.
Select “Bulk Input”



PRODUCTS & SERVICES ▾

APPLICATIONS & TECHNOLOGIES ▾

SUPPORT & EDUCATION ▾

TR

Oligo Entry

☐ Select All

ACTIONS: ▾

of Items: 1

GO

BULK INPUT 📄

1

Item Name



Scale ⓘ

25 nmole DNA oligo

Formulation

None

Sequence * (5' → 3')

5' MOD ▾

INTERNAL ▾

3' MOD ▾

BASES ▾

Bases: 0 (Min:15 Max:60)

Min Yield: 0 nmoles

GC: % Tm: °C ⚙️ DeltaG: kcal/mole

Purification

Standard Desalting

Services

No services are available on this scale

STEP 4

✓ Choose “File Upload” and upload the Excel spreadsheet with the six primers

Bulk Input ×

Questions about using this page? [Watch a video demo.](#)

Choose a delimiter OR **File Upload**

[Download an Excel template](#)

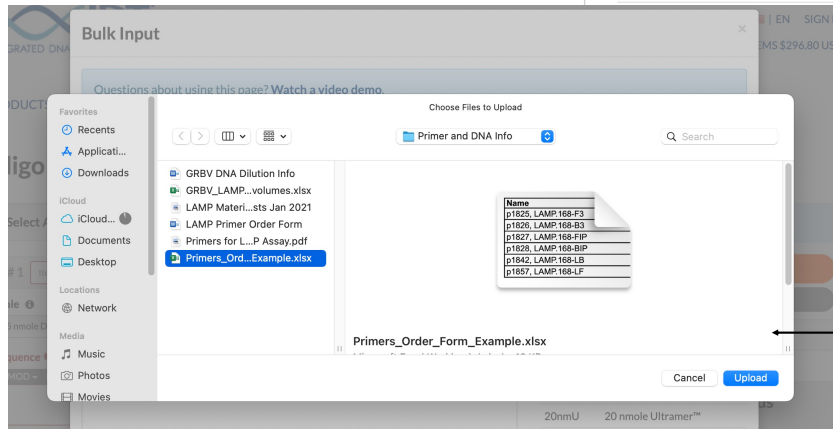
Tab/Excel ⌵ Choose File no file selected

-----Name & Sequence are required.-----Default scale is 25nmole.-----
-----Default purification is standard desalt.-----Purification options vary by
scale.-----Do not include column header row.-----Example:Seq1
ATCGTATGCTGATCTGATCAC 25nm STDSeq2 AACGTTTGCTGATCTAATCAC 25nm
STDSeq3 TTCGATGCCGATCAGATCAC 25nm STDEtc...

Code	Scale
25nm	25 nmole
100nm	100 nmole
250nm	250 nmole
1um	1 μmole
2um	2 umole
5um	5 μmole

STEP 5

✓ This upload window will pop-up and you can choose the [Excel spreadsheet](#) with the six primers



STEP 6

✓The information from the spreadsheet will populate the box.
Then, click on “Update”

Choose a delimiter
[Download an Excel template](#)
Tab/Excel

OR

File Upload
Choose File no file selected

p1825, LAMP.168-F3 Standard Desalting	GAATCGTTTGAATCGTAAGAGA	250 nmole DNA Oligo	25nm	25 nmole
p1826, LAMP.168-B3 Standard Desalting	CAGACAAATAAATACGATTCCTTC	250 nmole DNA Oligo	100nm	100 nmole
p1827, LAMP.168-FIP umole DNA Oligo	AATGACTCTCTGCGGCTTCTTCGATTTGGGTCGAAGA	1	250nm	250 nmole
p1828, LAMP.168-BIP umole DNA Oligo	TCAAAGACGTCGCTCTGGTTGCATCATTACGTCCTCCACC	1	1um	1 μmole
p1842, LAMP.168-LB Standard Desalting	GCTTTTAAAAACGACGTGT	250 nmole DNA Oligo	2um	2 umole
p1857, LAMP.168-LF Desalting	TTACGCGCAACAACAAGT	250 nmole DNA Oligo	5um	5 μmole
			10um	10 μmole
			4nmU	4 nmole Ultramer™
			20nmU	20 nmole Ultramer™
			PU	PAGE Ultramer™
			25nmS	25 nmole Sameday
			Code	Purification
			STD	Standard Desalting
			PAGE	PAGE \$60.00
			HPLC	HPLC \$42.00
			IEHPLC	IE HPLC \$45.00
			RNASE	RNase Free HPLC \$75.00
			DUALHPLC	Dual HPLC \$80.00
			PAGEHPLC	Dual PAGE & HPLC \$130.00

Entries: 6

UPDATE

This message will appear after select “Update” . This is OK.

An invalid scale code was used. The default will be used.

An invalid purification code was used. The default will be used.

STEP 7

✓Close out of the “Bulk Input” Form.
Behind this form, you will see that the primer information from the Excel file has populated the entry form.

Oligo Entry

☐ Select All
ACTIONS: ▾
of Items: 6
GO
BULK INPUT

1 p1825, LAMP.168-F3

Scale

25 nmole DNA oligo

Formulation

None

Sequence (5' → 3')

5' MOD ▾ INTERNAL ▾ 3' MOD ▾ BASES ▾

GAATCGTTTGAATCGTAAGAGA

Bases: 22 (Min:15 Max:60) Min Yield: 12 nmoles

GC: 36.4% Tm: 51°C DeltaG: -38.14 kcal/mole

Purification

Standard Desalting

Services

No services are available on this scale

2 p1826, LAMP.168-B3

Scale

25 nmole DNA oligo

Formulation

None

Sequence (5' → 3')

5' MOD ▾ INTERNAL ▾ 3' MOD ▾ BASES ▾

CAGACAAATAAATACGATTCCTTC

Bases: 25 (Min:15 Max:60) Min Yield: 12 nmoles

GC: 32% Tm: 50.4°C DeltaG: -42.73 kcal/mole

Purification

Standard Desalting

Services

No services are available on this scale

STEP 8

✓Using the drop down list, change the scale for each of the primers according to the Excel spreadsheet

Below is an example of how to change the scale for Primer #1

Oligo Entry

☐ Select All ACTIONS: ▾ # of Items: 6 GO BULK INPUT 📄

1 p1825, LAMP.168-F3 ✖ ⓘ

Scale ⓘ

✓ 25 nmole DNA oligo
100 nmole DNA oligo
250 nmole DNA oligo
1 μmole DNA oligo
2 μmole DNA oligo
5 μmole DNA oligo
10 μmole DNA oligo
4 nmole Ultramer™ DNA Oligo
20 nmole Ultramer™ DNA Oligo
PAGE Ultramer™ DNA Oligo
25 nmole Sameday

Formulation

None

Purification

Standard Desalting

Services

No services are available on this scale

✓The scales are changed for Primers 1 through 3

1 p1825, LAMP.168-F3 ✖ ⓘ

Scale ⓘ

250 nmole DNA oligo

Sequence ✖ (5' → 3')

5' MOD ▾ INTERNAL ▾ 3' MOD ▾ BASES ▾

GAATCGTTTGAATCGTAAGAGA

Bases: 22 (Min:5 Max:100) Min Yield: 60 nmoles

GC: 36.4% Tm: 50.2°C ⚙ DeltaG: -38.14 kcal/mole

Formulation

None

Purification

Standard Desalting

Services

☐ Analytical RP-HPLC \$55.00
☐ Analytical IE-HPLC pH 12.0 \$55.00
☐ \$75.00

2 p1826, LAMP.168-B3 ✖ ⓘ

Scale ⓘ

250 nmole DNA oligo

Sequence ✖ (5' → 3')

5' MOD ▾ INTERNAL ▾ 3' MOD ▾ BASES ▾

CAGACAAATAAATACGATTCCTTTC

Bases: 25 (Min:5 Max:100) Min Yield: 60 nmoles

GC: 32% Tm: 50.4°C ⚙ DeltaG: -42.73 kcal/mole

Formulation

None

Purification

Standard Desalting

Services

☐ Analytical RP-HPLC \$55.00
☐ Analytical IE-HPLC pH 12.0 \$55.00
☐ \$75.00

3 p1827, LAMP.168-FIP ✖ ⓘ

Scale ⓘ

1 μmole DNA oligo

Sequence ✖ (5' → 3')

5' MOD ▾ INTERNAL ▾ 3' MOD ▾ BASES ▾

AATGACTCCTGCGGCTTCCTTCGTATTTGGGTCGAA
GA

Bases: 40 (Min:5 Max:100) Min Yield: 200 nmoles

GC: 45% Tm: 66°C ⚙ DeltaG: -79.7 kcal/mole

Formulation

None

Purification

Standard Desalting

Services

☐ Analytical RP-HPLC \$55.00
☐ Analytical IE-HPLC pH 8.5 \$45.00
☐ Analytical IE-HPLC pH 12.0 \$55.00
☐ Na+ Salt Exchange \$75.00

✓The scales are changed for Primers 4 through 6

4

p1828, LAMP:168-BIP

Scale

1 µmole DNA oligo

Sequence

5' MOD INTERNAL 3' MOD BASES

TCAAAGACGTCGCTGTTGTCATCATTACGTCCTCCA
CC

Bases: 40 (Min:5 Max:100) Min Yield: 200 nmoles

GC: 50% Tm: 66.7°C DeltaG: -74.65 kcal/mole

Formulation

None

Purification

Standard Desalting

Services

☐ Analytical RP-HPLC \$55.00
☐ Analytical IE-HPLC pH 8.5 \$45.00
☐ Analytical IE-HPLC pH 12.0 \$55.00
☐ Na+ Salt Exchange \$75.00

5

p1842, LAMP:168-LB

Scale

250 nmole DNA oligo

Sequence

5' MOD INTERNAL 3' MOD BASES

GCTTTTAAAAACGACGTGT

Bases: 19 (Min:5 Max:100) Min Yield: 60 nmoles

GC: 36.8% Tm: 49.2°C DeltaG: -35.43 kcal/mole

Formulation

None

Purification

Standard Desalting

Services

☐ Analytical RP-HPLC \$55.00
☐ Analytical IE-HPLC pH 12.0 \$55.00
☐ \$75.00

6

p1857, LAMP:168-LF

Scale

250 nmole DNA oligo

Sequence

5' MOD INTERNAL 3' MOD BASES

TTACGCCAACAAACAAGT

Bases: 18 (Min:5 Max:100) Min Yield: 60 nmoles

GC: 44.4% Tm: 52.6°C DeltaG: -33.95 kcal/mole

Formulation

None

Purification

Standard Desalting

Services

☐ Analytical RP-HPLC \$55.00
☐ Analytical IE-HPLC pH 12.0 \$55.00
☐ \$75.00

STEP 9

✓Once all of the scales have been updated on the primers, add them to the Shopping Cart and Check Out

Shopping Cart Web Order #21589374

Current Order as of 2021/06/28 03:43:57 PM (CDT)

[Please click here to give us your feedback on your ordering experience.](#)

<div> <div>Select All</div> <div>DELETE SELECTED</div> </div>			
<div> <div># 1 p1825, LAMP:168-F3</div> <div>ACTIONS</div> <div> <div>qty</div> <div>1</div> <div>GO</div> </div> <div>\$26.40</div> </div>			
Product	250 nmole DNA oligo	Expected Ship Date	6/29/2021
Purification	Standard Desalting	Guaranteed Yield	13.8 ODs = 60 nmol = 409.3 µgrams
Length	22		
Sequence	GAA TCG TTT GAA TCG TAA GAG A		
<div> <div># 2 p1826, LAMP:168-B3</div> <div>ACTIONS</div> <div> <div>qty</div> <div>1</div> <div>GO</div> </div> <div>\$30.00</div> </div>			
Product	250 nmole DNA oligo	Expected Ship Date	6/29/2021
Purification	Standard Desalting	Guaranteed Yield	14.9 ODs = 60 nmol = 455.6 µgrams

CHECK OUT

ADD TO WISH LIST

E-MAIL CART / QUOTE

CONTINUE SHOPPING

Promo Code

APPLY

Order Summary

Subtotal	\$296.80 USD
S&H	TBD
Tax	TBD
Total	TBD

STEP 10

The Primers will be sent to you in a powder form and need to be resuspended by a lab.

Below is the protocol to be followed by the lab:

The LAMP primers from Integrated DNA Technologies need to be re-suspended in a buffer ('TE', 10mM Tris pH 8.0, 1.0 mM EDTA) to a concentration of 1mM. The 1mM oligonucleotides then need to be diluted in water to their respective concentrations to make up the LAMP primer stock. Aliquots of 12.5 µl (micro liter) will be needed.

LAMP Set I				10X LAMP primer mix			
			Final Concentration (µM)	Volume (µl) of 1 mM stock	Volume (µl) of 1 mM stock	Volume (µl) of 1 mM stock	Volume (µl) of 1 mM stock
				To make 200 µl	To make 200 µl	To make 1000 µl	To make 5000 µl
p1825	LAMP.168-F3	GAATCGTTTGAATCGTAAGAGA	0.2	0.4	1	2	10
p1826	LAMP.168-B3	CAGACAAATAAATACGATTCCTTTC	0.2	0.4	1	2	10
p1827	LAMP.168-FIP	AATGACTCCTGCGGCTTCCTTCGTATTTGGGTTCGAAGA	1.6	3.2	8	16	80
p1828	LAMP.168-BIP	TCAAAGACGTCGTCTGGTTGTCATCATTACGTCCTCCACC	1.6	3.2	8	16	80
p1842	LAMP.168-LB	GCTTTTAAAAACGACGTGT	0.4	0.8	2	4	20
p1857	LAMP.168-LF	TTCACGCCAACAACAAGT	0.4	0.8	2	4	20
			Total	8.8	22	44	220
			Water to 200 µl	191.2			
			Water to 500 µl		478		
			Water to 1000 µl			956	
			Water to 5000 µl				4780