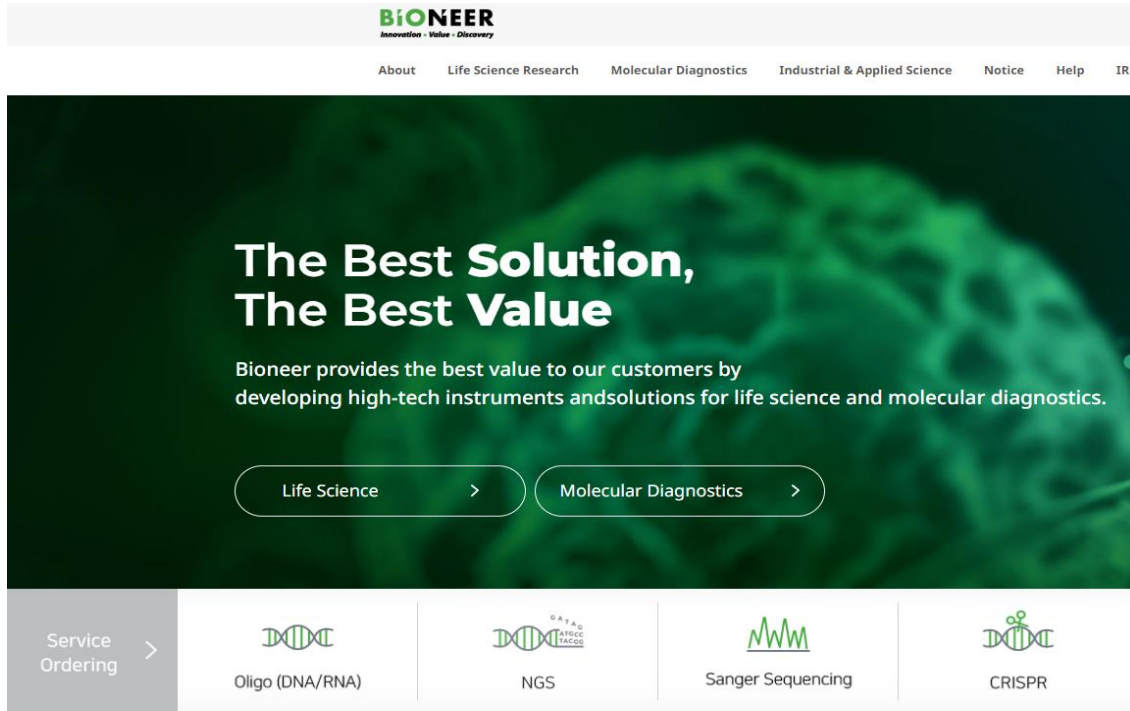


Instructions to order Oligo(DNA/RNA)

DNA Order method

- o website address : <https://eng.bioneer.com/>
- o Register and login
- o Click on 'Oligo (DNA / RNA)' from the main page



-Turnaround time (working day)

To purificate BioRP : Takes about 1~2 days.

To purificate HPLC and PAGE : Takes about 3~4 days include Modification.

o Actual recipient (Name of person to contact) : If the name of the buyer is different from the recipient, please change buyer's name to the recipient's name on the report sheet, so that the name of actual recipient will be displayed and printed out as you put in the report sheet.

- Ex: If you change your contact person name to 'Oligo' after logging in as 'Bioneer', it will be displayed as 'Bioneer (Oligo)' on the report sheet.

o Contact Mobile Phone : Please enter the recipient's phone number.

o Comments : Please fill out any additional inquiries.

To input DNA

o The oligo name cannot use '#, |' etc.

o The oligo sequence cannot contain spaces and special characters.

DNA

RNA

DNA

All oligos provided by Bioneer are applied to the *AccuOligo*® system, and all oligos are produced in a clean room and supplied to customers in a DNase, RNase, and DNA free state. Generally, supplied oligos go through synthesis, purification, QC, and dispensing processes, are dried, and are then delivered to customers. In the case of conventional synthesis services, there is a chance that dried oligos may fall during their delivery from shaking and impacts.

If the containers are opened during the delivery, parts of oligos may fall out, leading to yield loss. This may be much more severe when ordered in plates as cross-contaminations may occur. *AccuOligo*® technology allows the synthesized oligonucleotides to stick at the bottom of the tube even under intense vibrations. (Dried oligonucleotide composition of the new patent application' Patent 2006 Registration Number 10-0777249)

- ✓ Preventing dislodging and loss of oligos during production, packaging, and shipping
- ✓ Overcomes the phenomenon of small amounts of Oligo adhering to the lid

- ✓ Containing "Leak Inhibitors" not affecting protocols such as PCR, Sequencing, Enzyme cutting, etc.
- ✓ Prevent contamination between each well in the plate

[Order](#)

Thorough quality control

A total of 7 MALDI-TOF spectrometers are used to conduct QC inspection.

High-quality oligo

Supply of nuclease-free, DNA-free oligo by synthesizing in a clean room and eliminating truncated failures including n-1 mer with our proprietary Bio-RP high-purity purification system.

Exact concentration

To deliver with exact concentration, Bioneer use automatic dosing dispenser and *AccuOligo*® technology, to prevent the loss of oligo during transportation and opening.

Automated production

By establishing the world's first automated production line process, the entire process from ordering to synthesis, QC, and packaging is automated and produced using the 'Computer Aided Manufacturing (CAM) system.'

Mass production capacity

Able to produce maximum of 30,500 synthetic genes per day, and large-scale synthesis in mg to kg units is possible.

o Please refer to the content provided in each tab for details before placing an order.

Product Overview
Literature/Support
Ordering Info
FAQ

AccuEBQ® Probes
Standard Oligonucleotide
High Throughput
Modified Oligos
Dual Labeled Probes
Extendamers™
Large Scale

▶ **Standard Oligonucleotide**

Standard Oligonucleotide Synthesis Service is for ordering oligos of 130 mer or less. Various synthetic scales and purification methods can be selected depending on the applications. Selectable purification services include Bio-RP, HPLC, PAGE, etc.

▶ **Price List**

Synthesis Scale (nmole)	Price per Base (US \$)	Number of synthesizable base (mer)	Purification (US \$)			Guaranteed Amount (OD) Based on 20 basis			Delivery Period (days)		
			BioRP	PAGE	HPLC	BioRP	PAGE	HPLC	BioRP	PAGE	HPLC
25	0.29	15 - 60	Free	40.00	40.00	2	1	1.5	2	3	3
50	0.47	10 - 75	Free	40.00	40.00	4	2	2.5	2	3	3
200	0.92	5 - 110	Free	59.00	59.00	8	6	7	2	3	3
1,00	1.75	5 - 130	Free	100.00	100.00	30	18	25	2	3	3
10,00	14.00	5 - 50	Free	280.00	280.00	300	150	200	2	3	3
15,00	22.00	5 - 50	Free	420.00	420.00	Inquiry	Inquiry	Inquiry	3	4	4

Order Information Input Form

BIONEER
Innovation - Value - Discovery

Welcome, Bioneer Sign In or Create an Account ENGLISH

About Life Science Research Molecular Diagnostics Industrial & Applied Science Notice Help

Home Life Science Research Service Oligo Synthesis DNA Oligo

Search store here... 🔍

DNA Oligo

Please sign in before filling out form. Data will not be saved without sign in.

Contact Person Name *

Contact Email Address *

Comments

DNA Oligomer Information [Help] [Mixed Base Code] *

<input type="checkbox"/>	No	Name	Sequence (5' -> 3')	Scale	Purif
<input type="checkbox"/>	1	<input type="text"/>	<input type="text"/> <input type="button" value="check"/>	None	None

Modification 5': 3': Internal:

1 File Upload: [Download Form](#)

The input procedure is as follows:

1. **Name:** Enter the Oligo Name.
2. **Sequences:** Enter the nucleotide sequence information.
3. **Click the Check button to activate the Scale / Purif selection window**

Modification selection:

1. Enter the sequence, then select the required items at 5', 3', and internal positions, and click the Apply button.
- Fluorescent Dye Probes are only available for selection of either HPLC or PAGE purification.

DNA Oligomer Information [Help] [Mixed Base Code] [TM Calculator] [Search my orders] *

<input type="checkbox"/>	No	Name	Sequence (5' -> 3')	Scale	Purif
<input type="checkbox"/>	1	Bioneer	<input type="text" value="[[FAM]AGCATCAGCTACGACT"/> <input type="button" value="check"/>	None	None

Add Modifications in a selected sequence input box

Add/Remove Rows 1

Additional Input Methods ① Copy & Paste: ② File Upload:

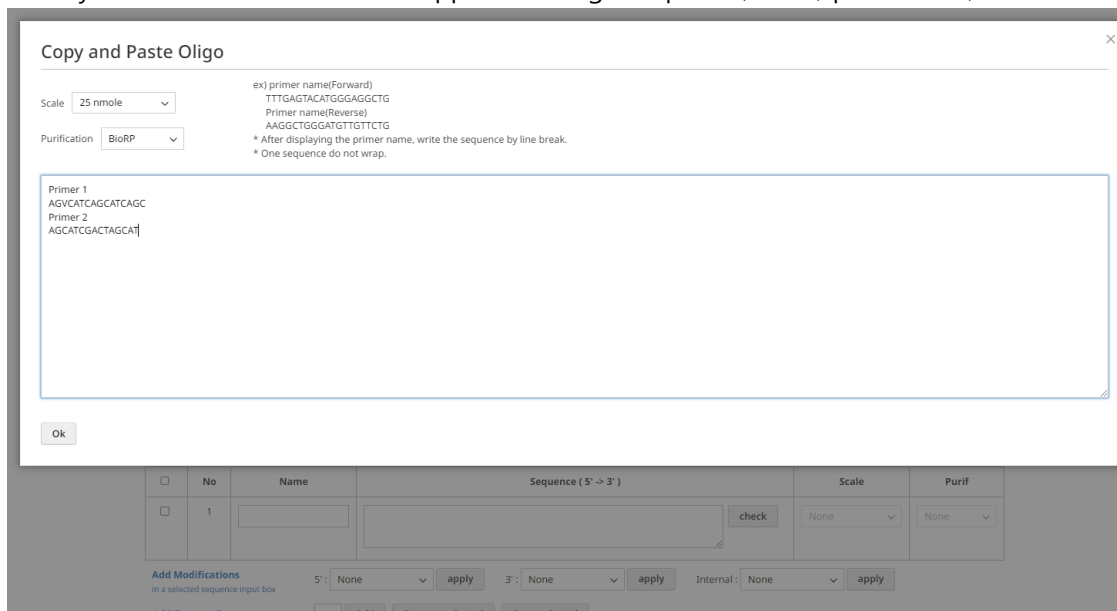
5': 3': Internal:

- Deoxyurine
- Desthiobiotin TEG
- DIG
- Dithiol
- DNP-TEG
- dSpacer
- EBQ**
- EBQ-dT
- EDTA-C2-dT
- Epoch Eclips Quencher

2. After completing the input, click the "Add to Cart" button to review the entered information and proceed to the payment stage.

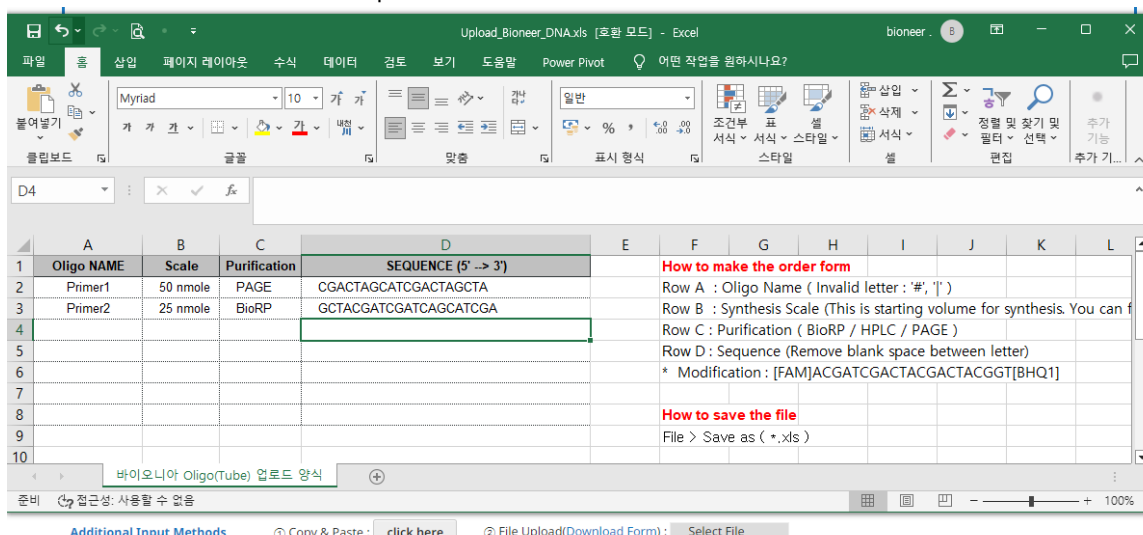
A. Copy & paste : It is convenient, if you have sequence for various Oligos.

1. Select scale and purification.
2. Prepare a file with oligo names and oligo sequences.
3. If you paste the contents, press 'OK' button, then it will check the contents automatically and show you the table with the data applied as Oligo sequence, scale, purification, etc.



B. Upload Excel file : It is convenient for bulk order, also you can use this when the scale or purification method is different for each oligo.

1. Download Excel form file, enter details for oligo and upload, then it will be applied and displayed as a table on the order page.
2. If you have any modification, you can apply Bioneer's labeling method or you can modify each of them from the table after upload the file.



Edit, cancel order

o Click the 'red pencil' icon from the oligo order in the shopping cart and click 'Update cart' after adding, deleting or changing the oligo. Click the trash icon to delete the entire oligo order.

RNA Order method



RNA

Bioneer siRNAs are manufactured in an RNase-free clean room and have proven to be highly efficient and stable after undergoing a strict QC process. Using the highly efficient Turbo si-Designer, 132,000 predesigned siRNAs have been designed and prepared for 44,000 target genes in humans, mice, and rats, with over 250 different modifications.



Turbo si-Designer

In collaboration with NGIC, we've created Turbo si-Designer, an algorithm for designing siRNAs. Our Genome-wide siRNA database offers highly efficient knockdown options.



The Bioneer's Guarantee

Guarantee Purchase three siRNAs for the same gene: We guarantee 80% or higher mRNA knockdown efficiency for at least two out of three. If not met, we'll provide additional siRNAs free of charge until the desired efficiency is achieved.

-Turnaround time (working day)

To purificate BioRP : Takes about 2~3 days.

To purificate HPLC and PAGE : Takes about 4~5 days include Modification.

o **Actual recipient (Name of person to contact)** : If the name of the buyer is different from the recipient, please change buyer's name to the recipient's name on the report sheet, so that the name of actual recipient will be displayed and printed out as you put in the report sheet.

- Ex: If you change your contact person name to 'Oligo' after logging in as 'Bioneer', it will be displayed as 'Bioneer (Oligo)' on the report sheet.

o **Contact Mobile Phone** : Please enter the recipient's phone number.

o **Comments** : Please fill out any additional inquiries.

To input RNA

o The oligo name cannot use '#, |' etc.

o The oligo sequence cannot contain spaces and special characters

AccuTarget™ Predesigned siRNA

AccuTarget™ Genome-Wide Predesigned siRNA
Maximizes siRNA knockdown efficiency while minimizing off-target effects.

Order

- Enter Gene symbol or id in the Search Keyword input field and click the Search button.

Order after search

* We periodically change the gene information using NCBI data. So if you want to reorder a gene with the same base sequence, Please order item [Double Strand RNA Oligo](#) using the base sequence we have provided. If you need your order information, Please contact 'export1@bioneer.co.kr'.

Organism All human mouse rat

Search field Gene ID Gene symbol Gene synonyms Accession No

Search keyword

ABL1

Search Result : 3

Organism	Gene symbol, id	Gene synonyms	Description	RNA accession	siRNA IDs	AccuTarget™ qPCR Primer
Human	ABL1, 25	ABL, CHDSKM, JTK7, bcr/abl, c-ABL, c-ABL1, p150, v-abl	ABL proto-oncogene 1, non-receptor tyrosine kinase	NM_005157.5 NM_007313.2	25-1 <input type="text" value="None"/> 25-2 <input type="text" value="None"/> 25-3 <input type="text" value="None"/> Pooling Service <input type="text" value="No"/>	P224160 V <input type="text" value="None"/>

- Three siRNAs can be selected per gene.
 - -1, -2, and -3 are ranked in order of highest theoretical knockdown efficiency.
 - qPCR primers for the gene of interest are also available for ordering (100 reactions / 200 reactions).
- ⇒ **When diluted to the indicated reaction volume, the concentration is 15 pmole.**

► The Bioneer's Guarantee

When you purchase three siRNAs for the same gene, Bioneer guarantees more than 80% knockdown efficiency of the target mRNA level in two out of three. If there is no more than 80% knockdown efficiency at the mRNA level of the target gene, we provide two siRNAs free of charge.

* However, the following supporting data required by the head office must be submitted separately. 1. siRNA Knockdown efficiency data: NC (**AccuTarget™ Negative Control**) and siRNA concentration at 100 nM

2. Transfection efficiency data: PC (**AccuTarget™GAPDH/GFP/Luciferase siRNA**) and NC (**AccuTarget™ Fluorescein-labeled Negative Control**)

Single Strand RNA(Custom)

Single strand RNA

Custom RNA Synthesis is a service that synthesizes RNA sequences requested by customers, and over 250 different modifications are available.

Order

- **Enter Gene symbol or id in the Search Keyword input field and click the Search button.**

Contact Person Name *

Contact Email Address *

Comments

Single Strand Information [Help] [Search my orders] *

<input type="checkbox"/>	No	Name	Sequence (5' -> 3')	RNA : [A, C, G, U]	DNA : [a, c, g, t]	Scale	Purif
<input type="checkbox"/>	1	<input type="text"/>	<input type="text"/>	<input type="button" value="check"/>		None ▾	None ▾

Add Modifications
in a selected sequence input box

5' : None ▾ 3' : None ▾ Internal : None ▾

Add/Remove Rows

Additional Input Methods

The input procedure is as follows:

1. **Name:** Enter the Oligo Name.
 2. **Sequences:** Enter the nucleotide sequence information.
 3. **Click the Check button to activate the Scale / Purif selection window**
- **On the RNA order page, note if you enter AGCU in capital letter, it will be recognized as RNA base and if you enter it in small letter, it will be recognized as DNA base.**

Modification selection:

1. Enter the sequence, then select the required items at 5', 3', and internal positions, and click the Apply button.
- When selecting Modification, only HPLC purification is available. (PAGE purification service is not provided for RNA products.)

Double Strand RNA(Custom)

Double strand RNA

Custom siRNA Synthesis is a service that synthesizes siRNA sequences requested by customers, and over 250 different modifications are available.

[Order](#)

Double Strand Information [\[Help\]](#) [\[Search my orders\]](#) *

<input type="checkbox"/>	No	Name	Sequence (5' -> 3') RNA: [A, C, G, U] DNA: [a, c, g, t]	Annealing	Scale	Purif
<input type="checkbox"/>	1		Sense <input type="text"/> AntiSense <input type="text"/> <input type="button" value="check"/>	None ▾	None ▾	None ▾

Add Modifications

in a selected sequence input box

5' : None ▾ 3' : None ▾ Internal : None ▾

Add a Overhang

in a selected sequence input box

None ▾

Add/Remove Rows

1

Additional a Input Method

File Upload(Download Form) :

1. When entering the Sense sequence, the complementary sequence will automatically be entered into the Antisense field.
-> To change the Antisense sequence, simply erase the sequence by using the Backspace key and then input the desired sequence.
 2. Double-stranded RNA input is allowed for sequences ranging from 5 to 30 nucleotides in length.
 3. Clicking the Check button will activate the Annealing, Scale, and Purification selection options.
-> Selecting "Yes" in Annealing will provide double-stranded RNA, while choosing "No" will provide single-stranded RNA respectively.
 4. Add an Overhang: Select your desired Overhang and click the apply button to add it.
 - 5.
- **On the RNA order page, note if you enter AGCU in capital letter, it will be recognized as RNA base and if you enter it in small letter, it will be recognized as DNA base.**

Modification selection:

1. Enter the sequence, then select the required items at 5', 3', and internal positions, and click the Apply button.
- When selecting Modification, only HPLC purification is available. (PAGE purification service is not provided for RNA products.)

AccuTarget™ Human miRNA Mimic & Inhibitor

AccuTarget™ Human miRNA mimics & inhibitors

AccuTarget™ human miRNA is provided by synthesizing the sequence information of miRBase Ver.22.

Order

- miRBase site link : <https://eng.bioneer.com/mirna-library-mimic>

Order after search

* You can search for mature Id in Homo sapiens miRNAs (miRBase ver.22) List.

Search keyword

Search

Search result : 1

Accession	Mimic	Inhibitor	
MI0000060	hsa-let-7a-1 <input type="text" value="None"/>	hsa-let-7a-5p <input type="text" value="None"/>	hsa-let-7a-3p <input type="text" value="None"/>

miRNA library mimic ver.22

Mature ID mimic	Mature ID inhibitor		Accession
hsa-let-7a-1	hsa-let-7a-5p	hsa-let-7a-3p	MI0000060
hsa-let-7a-2	hsa-let-7a-5p	hsa-let-7a-2-3p	MI0000061
hsa-let-7b	hsa-let-7b-5p	hsa-let-7b-3p	MI0000063
hsa-let-7c	hsa-let-7c-5p	hsa-let-7c-3p	MI0000064
hsa-let-7d	hsa-let-7d-5p	hsa-let-7d-3p	MI0000065
hsa-let-7e	hsa-let-7e-5p	hsa-let-7e-3p	MI0000066
hsa-let-7f-1	hsa-let-7f-5p	hsa-let-7f-1-3p	MI0000067
hsa-let-7f-2	hsa-let-7f-5p	hsa-let-7f-2-3p	MI0000068
hsa-mir-15a	hsa-mir-15a-5p	hsa-mir-15a-3p	MI0000069
hsa-mir-16-1	hsa-mir-16-5p	hsa-mir-16-1-3p	MI0000070
hsa-mir-17	hsa-mir-17-5p	hsa-mir-17-3p	MI0000071
hsa-mir-18a	hsa-mir-18a-5p	hsa-mir-18a-3p	MI0000072
hsa-mir-19a	hsa-mir-19a-5p	hsa-mir-19a-3p	MI0000073
hsa-mir-19b-1	hsa-mir-19b-1-5p	hsa-mir-19b-1-3p	MI0000074

1. Copy and paste the miRNA Mature ID you wish to order from the miRBase link into the search Keyword field, then click the Search button.
 2. Choose the desired synthesis scale (nmole) and Purification option before proceeding with your order.
 3. Mimic and inhibitor are separate items, so you need to select each one individually.
-> Inhibitor 5p is the complementary sequence of the sense sequence of the mimic, and 3p is the complementary sequence of the antisense.
- If modifications are required, please inquire separately.
 - For miRNAs from miRBase Ver.22, if ordering from a different version, please input as Custom (double / single strand) order.

AccuTarget™ siRNA control / miRNA control

AccuTarget™ miRNA Controls

Verified highly efficient target gene KD effect AccuTarget™ PC siRNA (Human GAPDH, GFP, Luciferase)

[Order](#)

AccuTarget™ siRNA Controls

Verified highly efficient target gene KD effect AccuTarget™ PC siRNA (Human GAPDH, GFP, Luciferase) Products with low homology to the target gene AccuTarget™ NC siRNA (for Human, Mouse, Rat)

[Order](#)



AccuTarget™ GFP Positive Control siRNA

As low as **\$76.00**

Purification

BioRP HPLC

Scale

5 nmole 10 nmole
 20 nmole



AccuTarget™ GAPDH Positive Control siRNA

As low as **\$76.00**

Purification

BioRP HPLC

Scale

5 nmole 10 nmole
 20 nmole



AccuTarget™ Control siRNA Set

As low as **\$140.00**

Target

GAPDH GFP

Luciferase

Purification

BioRP HPLC



AccuTarget™ Negative Control siRNA

As low as **\$76.00**

Purification

BioRP HPLC

Scale

5 nmole 10 nmole
 20 nmole



AccuTarget™ Luciferase Positive Control siRNA

As low as **\$76.00**

Purification



AccuTarget™ Fluorescein-labeled Negative Control siRNA, HPLC

As low as **\$168.00**



AccuTarget™ Luciferase Control siRNA Set (HPLC, 5 nmole/P+2 nmole/N) [SS-1013]

\$168.00



AccuTarget™ GFP Control siRNA Set (HPLC, 5 nmole/P+2 nmole/N) [SS-1012]

\$168.00

- When ordering the required Control products, simply select the Purification / Scale options and proceed with your order.
- We do not provide sequence information for Control products.
- If modifications are required, please inquire via email along with the modification details.