# How to order a DNA/RNA oligonucleotide

Our company provides a convenient form for you to place orders for synthetic nucleic acid fragments. To place an order, select the **Order DNA/RNA Synthesis** tab.

A form consisting of several items will appear on the screen. In the first item labeled Type, select the type of oligonucleotide to be ordered. After expanding the arrow on the right side, we will see a list from which we select the type of nucleic acid fragment ordered. If it is from:

- deoxynucleoside series then we choose **DNA**,
- ribonucleoside series then we choose **RNA**,
- series where it has a 2'-O-methyl substituent in the 2' position of the ribose ring then we choose **RNA 2-O-Me**,
- **(option available soon)** composed of a mixed sequence we choose Mixed [If we choose this option, an additional window will appear, in which we should choose which series will be assigned an uppercase letter and which a lowercase letter. Only mixed sequences composed of two different series can be ordered using the form].

**NOTE!**
**If the sequence you intend to order is more complicated, please provide a detailed description by e-mail – info@futuresynthesis.pl**

After selecting the type of sequence to be ordered, we move to the **Scale** box. The synthesis scale is an important parameter because it determines for us the amount of material you will receive as a result of placing an order. When you expand the arrow on the right, you will see a list of available synthesis scales. Next to the arrow there is a button with a question mark. After clicking on it, you will develop information on the amount of material we guarantee when selecting the appropriate synthesis scale.

The next step is to enter the **name** of the oligonucleotide you are ordering. This name should be specific to you and consist of eight letters. All longer names will be abbreviated. The name entered here will also appear on the final report form after the synthesis is completed.

After specifying the name, we go below and in the wide field described as **SEQUENCE 5'->3'** enter the sequence according to which the oligonucleotide is to be synthesized. Here we remember to enter the sequence from its 5' end towards the 3' end. You can also paste the sequence using the paste function, or by moving it using the clipboard with the Ctrl +C, Ctrl +V function. There is no limitation as to what you can type in the sequence however, our company will undertake the synthesis of oligonucleotides up to 100-mer length for DNA series and 70-mer length for RNA series. In the gray box below, a counter will show us the current length of the entered sequence for the ordered oligonucleotide. To enter the sequence correctly, use the symbols according to our symbol legend. The symbol legend is located on the left side of the screen.

If the ordered oligonucleotide will have specific modifications on one of the two ends, such information should be placed by selecting from the list of available modifications in the **Labeling (5') or (3') field.**

The last field selects the method to be used so that the resulting oligonucleotide meets your expectations in terms of purity. The **Purification** command contains 4 items:

- **Desalted** - the oligonucleotide is precipitated from alcoholic solutions after synthesis. This method effectively removes synthesis residues and salts, but does not remove shorter-chain sequences that are formed as a by-product during synthesis.

- **RP-18 standard** - the oligonucleotide is pre-purified from oligonucleotides with shorter sequences and then also precipitated. However, this method does not guarantee obtaining a pure product only a partially purified product. It is only available for DNA oligonucleotides, unmodified, up to 35 pz in length.

- **HPLC** - this purification method involves separation of the oligonucleotide on an RP-18 phase column using high-pressure liquid pumps. This method is suitable for purification of short nucleic acid fragments.

- **PAGE** - this method of oligonucleotide purification involves the separation of oligonucleotides in a polyacrylamide gel in an electric field. Under the influence of an applied voltage, oligonucleotides of different lengths migrate differently, hence it is possible to separate them. The final product is also precipitated from the alcohol/water buffer mixture. This method is recommended for the purification of long nucleic acid fragments.

After filling out the form, select the **Quote** button to calculate and display on the screen the net price for the synthesis of the ordered oligonucleotide. The next page will show the net price and all the previously entered data. To the right of the price, two buttons **Add to Cart and Place Order** will appear.

We select the first **Add to Cart** button if the parameters of the entered synthesis are correct and we want to add more oligonucleotides to the order. To order more oligonucleotides, we follow the same procedure as described above.

If we want to complete the order, we select the **Submit Order** button.

After selecting this option, we will be presented with a view of the shopping cart and fields to fill in the data needed for invoicing and customer identification. If you have previously obtained a promotional code, you should place it at this point so that the discount you are entitled to is taken into account. If you have any special wishes regarding the synthesis to be performed, please put information about it in the **Your comments box.**

After filling in all the data, press the **Send** button and your order will be sent to the laboratory department for verification and to start the synthesis process. After verification, you will receive an email confirming that your order has been accepted.