

siRNA DESIGN & SYNTHESIS SERVICES

Improve Your Silencing Efficiency Using Our Proprietary siMAX™ siRNA Design and Synthesis Technology

siMAX™ siRNA Design

- Free Online Design Tool
- siRNA Design Project Service

siMAX™ siRNA Synthesis

- Customised siMAX™ siRNA
- Predesigned and Validated siMAX™ siRNA
- siMAX™ siRNA Quality Assurance

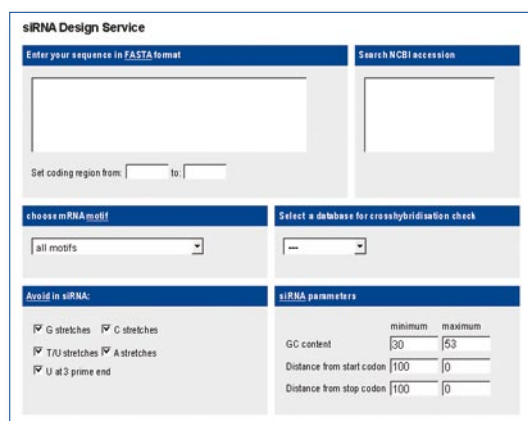
siMAX™ siRNA from Eurofins MWG Operon

Eurofins MWG Operon offers the design and synthesis of custom and predesigned siRNA. Our proprietary siMAX™ technology allows us to produce high quality siRNA with maximum silencing efficiency in fast turnaround times. siRNA candidate sequences undergo special BLAST analysis to reduce off-target effects and to distinguish between alternative splice forms. Finally, the secondary structure of the siRNA/mRNA target site can be viewed, thus providing customers with the option of selecting designs of highly accessible secondary structure target sites.

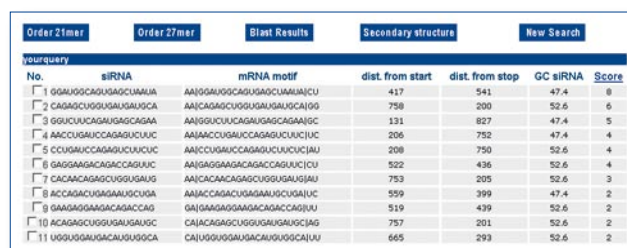
siMAX™ siRNA Design

Design is a crucial factor for the specificity and functionality of siRNA molecules. Our siMAX™ design is based on published data including Reynolds et al., Nature Biotechnology. The siRNA candidates are ranked based on 12 decisive criteria including GC content, secondary structure, or the specific occurrence of nucleotide bases at critical positions in the siRNA search motif.

Free Online siRNA Design Tool

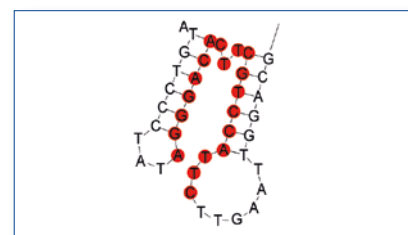
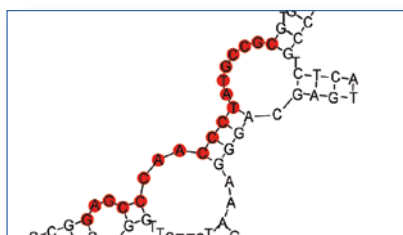
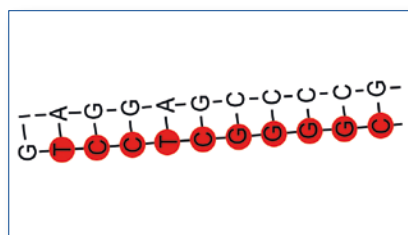


Our free online siMAX™ siRNA Design Tool combines advanced design features with full transparency. This tool is a flexible, open system with the ability to customise your design process to get the results you need.



No.	siRNA	mRNA motif	dist. from start	dist. from stop	GC siRNA	Score
1	GGGAUGGCAGUSAGCUAAUA	AAUGGAUGGCAGUSAGCUAAUAUCU	417	541	47.4	8
2	CAGAGCUUGUGAUGAUGCA	AAACAGAGCUUGUGAUGAUGCAUUG	758	200	52.6	6
3	GGUCUUCAGAUAGCAGAA	AAUGUCUUCAGAUAGCAGAAUAGC	131	827	47.4	5
4	AACUCUAGCAGAGUCUC	AAACUCUAGCAGAGUCUCUUC	206	752	47.4	4
5	CCUGAUCAGAGUCUC	AAACUGAUCAGAGUCUCUUC	208	750	52.6	4
6	GAGAGAGACAGCAGUC	AAAGAGAGAGACAGCAGUCUUC	522	436	52.6	4
7	CACACAGAGCUGUGAUG	AAACACACAGAGCUGUGAUGAU	753	205	52.6	3
8	ACCAGACUGAAGUAGUC	AAACAGACUGAAGUAGUCUUC	559	399	47.4	2
9	GAAGAGAGACAGCAG	GAAGAGAGAGACAGCAGUUC	519	439	52.6	2
10	ACAGAGCUGUGAUGAUGC	CAACAGAGCUGUGAUGAUGCAU	757	201	52.6	2
11	UGUGAUGAUGAUGAUGCA	CAUUGUGAUGAUGAUGAUGCAU	665	293	52.6	2

The siRNA/mRNA target site preview function has been optimised to illustrate the top folding probability of each target site.



Our design program is linked to our Ecommerce System, facilitating a seamless transition from the design to the purchase of your siRNA.

siRNA Design Project Service

Eurofins MWG Operon has substantial experience in performing design projects and offers individual optimised solutions for your requirements. All design projects include a highly specific comparison with our proprietary data bases. Your data will be handled absolutely confidentially as all processes are performed internally. Our bioinformatic department is supported by a powerful computing centre and IT team which allows us to process your requests fast and competently.

siMAX™ siRNA Synthesis

siMAX™ siRNA is available as predesigned siRNA molecules as well as custom synthesised 21mer or 27mer duplexes. Two purification grades, desalted and HPLC, are available in three different scales. Our siRNA is delivered as a ready-to-use duplex in 1 ml 5x siMAX™ buffer (30mM HEPES, 100 mM KCl, 1mM MgCl₂, pH = 7.3) by default.

Overview

siMAX™ siRNA	Custom		Predesigned	siMAX™ Control Duplexes ¹⁾
Purification	Desalted	HPLC	HPLC	HPLC
Purity ²⁾	> 70%	> 90%	> 90%	> 90%
Deprotected	Yes	Yes	Yes	Yes
Duplexed	Yes	Yes	Yes	Yes
Ready to use	Yes	Yes	Yes	Yes
Modifications possible	No	Yes	Yes	Yes
Turnaround time (wd)	5	6	6	6

1) Control duplexes, e.g. Lamin A/C

2) Purity is based on CGE analysis of single strand

Customised siMAX™ siRNA

siMAX™ 21mer

Our 21mer siRNA molecules are synthesised with dTdT overhang as standard: (NN)-N 19 template (21mer, dTdT). It is also possible to order siRNAs with alternate overhangs which can be selected in the order menu of our Ecommerce System.

siMAX™ 27mer

These siRNA molecules have no dTdT overhang or any sticky overhang at all. 27mers might show higher efficiency in comparison to the "classical" 21mer siRNA in certain cases (Kim et al., in Nature Biotechnology 2005 23(2): 222-226).

siMAX™ Modifications

Eurofins MWG Operon offers a selection of 5' and 3' modifications on either the sense or antisense strands of the siRNA duplex.

FAM	Cy3	Biotin	Amino C6
HEX	Cy5	Biotin-TEG	Amino C7
TET	Fluoresceine	Phosphate	Cholesteryl

Predesigned & Validated siMAX™ siRNA

siMAX™ siRNA is available as predesigned duplexes for human, mouse and rat. The databases of all predesigned and validated siRNAs and siRNA control duplexes are available in the Ecommerce System of Eurofins MWG Operon.

siMAX™ siRNA Quality Assurance


Consistent quality control of siRNA molecules is crucial to ensure reliable results of your silencing experiments. Each single strand of RNA is analysed by MALDI TOF mass spectrometry and capillary gel electrophoresis (CGE). The MALDI TOF technique is used to confirm the sequence identity of the individual single strands. Purity of the strands is then confirmed using CGE analysis. Both the MALDI TOF and CGE traces of the single strands are provided free of charge with each siRNA order.

Online Ordering and More – Our Ecommerce System is Set Up for Your Convenience

1. Personal Account

Login at <http://www.eurofindna.com>

If you are entering our Ecom for the first time, just visit our homepage and click on "New Customer". If you are already a customer of Eurofins MWG Operon, identify yourself with your email address and password.



2. Account Options

Within your account you can define general settings, set up your personal order preferences and change or add shipping and billing addresses. The group administration allows you to share specific information with other researchers of your choice.

3. Prepayment Service

With our prepaid service option EVOcard, you can save your budget and benefit from various administrative advantages.

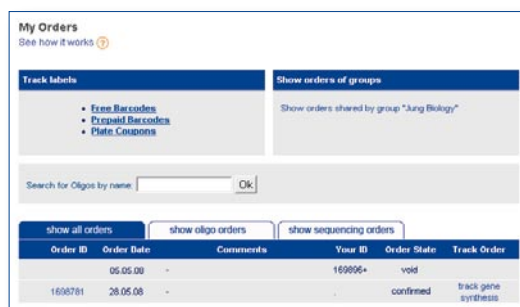


4. Online Ordering & Price Information

Select your required product within the "siMAX™ siRNA" menu. After submitting your entry, you can find all details in your order basket. Press "order now" and choose your preferred payment method. Your individual prices are displayed in the order summary prior to submitting your order.

5. Order Tracking & Order History

In your personal Ecom account all your order data are stored. Find your order history via the "my orders" button where you can track the process status of your orders at any time and download your order confirmations and delivery notes.



Order ID	Order Date	Comments	Your ID	Order State	Track Order
05.05.00	-		16986*	void	
1608781	28.05.08	-		confirmed	track gene synthesis

Any Questions?

Feel free to contact our customer support team if you need any assistance.



Email:

support@mwgdna.com

Phone:

+49 8092 8289-77

Our official business hours are:

8 a.m. – 6 p.m. CET

Free Phone Numbers:

Italy	0800 785950
France	0800 903807
Denmark	8088 1262
UK	0800 0323135
Ireland	1800 555056
Sweden	020 798148
Norway	0800 13844
Finland	0800 112744
Switzerland	0800 562013

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