

Reagents & kits

Nexterion® kits



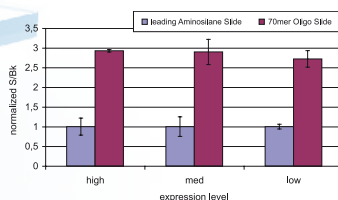
The quality of the results from a microarray experiment is dependent on many factors, the substrate utilized for printing, the printing buffer, the labeling method employed, and the blocking and hybridization conditions utilized. For this reason, SCHOTT Microarray solutions provide a range of complete slide processing kits optimized to get the best performance from the Nexterion® coated slides.

Nexterion® Epoxy Slide Oligo Processing Kit (order code: 1209009) (for 25 slides)

SCHOTT Microarray Solutions offers a kit with pre-prepared reagents for the blocking, hybridization and washing of 25 printed epoxysilane coated slides. The reagents in the kit are optimized for use with epoxy coated slides (e.g. Nexterion® Slide E) printed with 20 to 70 mer oligonucleotides. The Nexterion® Oligo Pre-Hyb offers the advantage combining some of the initial washing and blocking steps thereby reducing the overall processing time. Nexterion® Oligo Hyb contains formamide, which allows for increased hybridization stringency at decreased hybridization temperatures. The kit includes an easy-to-use slide processing protocol.

Superior signal-to-background ratios

Enhanced signal-to-background ratios were observed over the entire dynamic range (as shown by the results from low, medium, and high expressor genes) when 70 mer oligonucleotides were spotted onto the Nexterion® Slide E. The covalent probe binding properties of the slide surface allow the optimal presentation of the probe and therefore improved target accessibility for hybridization. In addition, the reactive groups on the slide surface can be fully deactivated using a blocking reagent greatly reducing the background fluorescence caused by non-specific binding.



The graph shows normalized signal-to-background ratios (S/Bk) for the market leading aminosilane slide and Nexterion® Slide E. Signal-to-background ratios were calculated for three selected genes with different expression levels (low, medium and high). To allow the presentation of all the data in one graph, all the results were normalized against the values obtained for the market leading aminosilane slide.

The Epoxy Slide Oligo Processing Kit contains the following components:

Process step	Components	Reagent concentration	Quantity
Blocking	Nexterion® Oligo Pre-Hyb	Ready-to-use 1x	1 x 500 mL
Hybridization	Nexterion® Oligo Hyb	Ready-to-use 1x	1 x 10 mL
Washing	Nexterion® Oligo Wash A	20x	1 x 1000 mL
	Nexterion® Oligo Wash B	20x	1 x 100 mL

Nexterion® Aminosilane Slide Processing Kit (order code: 1209008) (for 25 slides)

SCHOTT Microarray Solutions also offers a kit for 25 printed aminosilane coated slides (e. g. Nexterion® Slide AStar/A+). The Nexterion® Block A offers the advantage of combining some of the initial washing and blocking steps thereby reducing the overall processing time. Nexterion® Oligo Hyb contains formamide, which allows for increased hybridization stringency at decreased hybridization temperatures. The kit includes an easy-to-use slide processing protocol.

The Aminosilane Slide Processing Kit contains the following components:

Process step	Components	Reagent concentration	Quantity
Blocking	Nexterion® Block A	Ready-to-use 1x	1 x 500 mL
Hybridization	Nexterion® Oligo Hyb	Ready-to-use 1x	1 x 10 mL
Washing	Nexterion® Wash A	20x	1 x 1000 mL
	Nexterion® Wash B	20x	1 x 100 mL

To assist customers evaluating the Nexterion® slide surfaces, SCHOTT offers ready-to-use slide evaluation kits for two of its most commonly used slide surfaces. The Nexterion® Slide Evaluation Kits offer users the opportunity to fully evaluate the slide performance by utilizing the optimized protocol and ready-to-use reagents included in the kit. The kit consists of ten slides with test oligonucleotides, optimized reagents and detailed protocols.

Nexterion® “Active” Slide Chemistry Evaluation Kits

	Components	Quantity
Microarray Slide	Nexterion® Slide E	10 slides
Spotting	Nexterion® Spot	10 mL
	Nexterion® Spot LE Kit (Low Evaporation Buffer)	10 mL
Blocking	Nexterion® Block E	100 mL
Hybridization	Nexterion® Hyb	10 mL
Test probe	Oligo probe	2 nmol
Test target	Oligo target	3 pmol

Nexterion® Slide E Evaluation Kit
(order code: 1117570)

	Components	Quantity
Microarray Slide	Nexterion® Slide AL	10 slides
Spotting	Nexterion® Spot	10 mL
Hybridization	Nexterion® Hyb	10 mL
Test probe	Oligo probe	2 nmol
Test target	Oligo target	3 pmol

Nexterion® Slide AL Evaluation Kit
(order code: 1066026)

Important information about patents

Using arrays based on SCHOTT Nexterion® products for dual color analysis on a single array in which at least two different samples are labeled with at least two different labels may require a license under one of the following patents: U.S. patent nos. 5,770,358 or 5,800,992 or 6,225,625 and U.S. patent no. 5,830,645. Manufacturing and use of probe arrays may require a license under the following patents: U.S. patent no. 6,040,138 or 5,445,934 or 5,744,305 and under the following patents owned by Oxford Gene Technology Ltd. (“OGT”): European patent no. EP 0,373,203, U.S. patent nos. 5,700,637 and 6,054,270 and Japanese patent nos. 3393528 and 3386391 (“The OGT patents”). Other patents may apply. The purchase of SCHOTT Nexterion® products does not convey any license under any of the OGT patents or any of the other patents referred to. For all applications SCHOTT North America Inc. and SCHOTT Technical Glass Solutions GmbH make no representation or warranty that the practice of its technology and products or any improvement will not infringe or violate any domestic or foreign patent of any third party. Before making or using any oligonucleotide arrays you should contact OGT to discuss a licence. To inquire about licensing under the OGT patents, please contact OGT at licensing@ogt.co.uk.

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