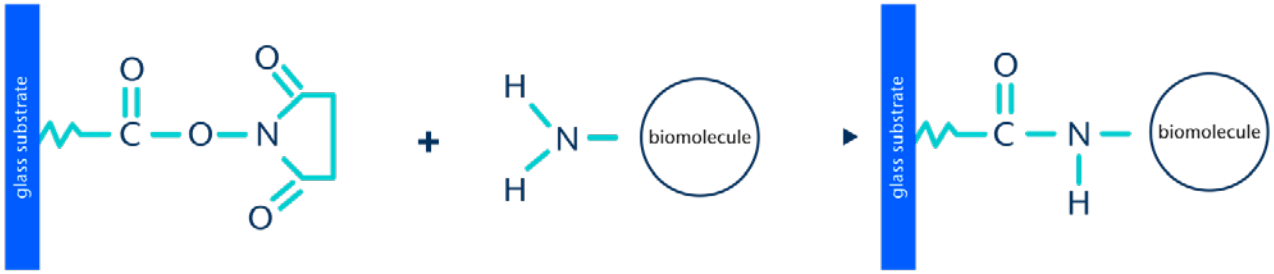
SCHOTT NEXTERION® 3-D Polymer Coating (P)

The NEXTERION® 3-D Polymer coating is the ideal surface for the covalent immobilization of biomolecules containing primary amines (NH^2 groups) such as proteins, antibodies and most peptides. Furthermore, for amino-modified biomolecules like glycans or oligonucleotides this surface may be the coating of choice. SCHOTT specifically developed the 3-D Polymer coating as a dedicated substrate surface for printing low-density antibody microarrays. It produces excellent signal-to-background ratios, and exceptionally wide dynamic ranges compared to conventional "two-dimensional" coatings through a unique combination of low non-specific binding characteristics, and high probe loading capacity.

Produced in ISO class 5 clean room conditions using a proprietary thin-film deposition process and running a stringent quality control system, the 3-D Polymer coating is offered in standard and custom formats.

Coating Chemistry:



Shelf Life:
12 months in sealed original packaging when stored at –20 °C.

Immobilization Method:
Covalent binding via amine reactive chemistry.

Probe Types:
- Amino-linked glucans
- Antibodies and antibody fragments
- Functional proteins such as enzymes or receptors
- Small protein fragments such as peptides
- Amino-modified oligonucleotides 16 to 70 mers

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Material:
- High-quality borosilicate glass
- Alternative substrate materials can be offered

Formats:
- Standard sizes (slide format, SBS plate format)
- Customized dimensions and thicknesses

Structuring:
- Pre-scoring
- Hydrophobic coating for multiplexing

Markings:
- Barcodes (1-D e.g. code 39, code 128; 2-D e.g. QR, data matrix)
- Logos
- Position markings and fiducials

Quality:
- Proprietary thin-film deposition process optimized by SCHOTT
- Excellent intra- and inter-lot reproducibility
- Physical and functional quality control
- ISO class 5 clean room production
- Relevant processes in place for diagnostic company needs

Supply Forms:

Product	Size (mm)	Thickness (mm)	Pieces per pack
Slide P, barcoded	75.6 x 25.0	1.0	25
Plate P	110.0 x 74.0	1.0	5
Customized P	Variable	0.17 – 2.50	Variable

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