Electronic Supplementary Information:

Manuscript "Low-cost multilevel microchannel lab on chip: DF-1000 series dry film photoresist as a promising enabler"

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Table 2: Optical properties (excitation and emission wavelength) of some fluorophores and fluorescent particles commonly used in microfluidics.

		Absorption (nm)	***Emission (nm)***
Dye	FITC	494	521
	Rhodamin B	542	627
	Cy5	650	792
	YOYO-1	491	509
	Hoeschst	343	483
	TurboGFP	482	502
Magnetic-Fluorescent Beads	screenMAG-Amine (Chemicell, 1µm diameter)	502	525
	Carboxyl Magnetic Particles (Spherotech, 2 and 5 µm diameter)	488	530

Biocompatibility

Because microfluidic devices are used in a lot of biological applications we also tested the cytotoxicity of one sample of the DF-1050 (laminated onto a silicon substrate, insulated and hard-baked) according to the protocol of ISO 10993-5. L-929 mouse fibroblast cells were used. Polyurethane film containing 0.1% zinc diethyldithiocarbamate and high density polyethylene sheet were used as positive and negative control respectively.
Materials were incubated for 24 h at 37°C in EMEM10 (Single strength Minimum Essential Medium Eagle) respecting a ratio of the surface area to the cell culture medium of 3 cm²/ml. 100 µl of the test material extract was used to cultivate L-929 cells. For this purpose, wells of a 96-well plate were seeded with approximately 104 cells per well and incubated during 24 h under standard conditions to obtain semi-confluent monolayers of cells prior to use. MTS cytotoxicity test was performed to quantify the viability cells rate after 24 h of incubation within the extract. The statistical results have shown a viability rate of 3.9% for the positive control articles whereas for the negative control and the DF-1050 the viability rate was 97.1% and 93 % respectively.
This study proves that DF-1050 is suitable for biological applications.