

Materials List for:

Multi-electrode Array Recordings of Neuronal Avalanches in Organotypic Cultures

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Materials

Name	Company	Catalog Number	Comments
Integrated planar multielectrode array	 Multi Channel System MCS GmbH	200/30iR-ITO-w/o	Titanium Nitrate (TiN) electrodes (30 mm diameter) have large surface resulting in low impedance (~1.5 kΩ at 1 kHz) and excellent wide-band recordings (w/o — without ring)
Chamber glass	www.aceglass.com	7620-32	Threaded glass cylinder
Chamber cap	www.aceglass.com	7622-114	Plastic cap with Teflon insert
Sylgard 184	World Precision Instruments, Inc.	SYLG184	Two-part silicone elastomer
Poly-D-lysine	Sigma-Aldrich	P6407-5mg	γ-irradiated, lyophilized powder, cell cultured tested. Reconstituted with 5 ml deionised water before use.
Gey's Balanced Salt solution	Sigma-Aldrich	G9779-500mL	sterile filtered and cultured tested
chicken plasma	Sigma-Aldrich	P3266-5mL	Lyophilized, reconstitute with 5 ml deionized water before use.
thrombin	Sigma-Aldrich	T6634-1KU	from bovine plasma, lyophilized powder form.
horse serum	Sigma-Aldrich	H1138-100mL	donor herd, heat inactivated, cell culture tested
Basal Medium Eagle	Invitrogen	21010-046	1x, 500 ml - (+) Earle's Salts, (-) L-glutamine),
Hank's Buffered Saline Solution	Invitrogen	24020-117	500 ml - (+) Magnesium, (+) calcium, w/phenol red)
Chamber slides	Lab-Tek	177429	
Uridine	Sigma-Aldrich	U3003	
ARA-C cytosine-β-D-arabinofuranoside	Sigma-Aldrich	C6645	
5-fluoro-2'-deoxyuridine	Sigma-Aldrich	F0503	