

Materials List for:

Chemically-blocked Antibody Microarray for Multiplexed High-throughput Profiling of Specific Protein Glycosylation in Complex Samples

Chen Lu¹, Joshua L. Wonsidler¹, Jianwei Li², Yanming Du¹, Timothy Block³, Brian Haab⁴, Songming Chen⁵

¹Institute for Hepatitis and Virus Research

²Department of Microbiology and Immunology, Thomas Jefferson University

³Drexel University College of Medicine

⁴Van Andel Research Institute

⁵Institute for Hepatitis and Virus Research, Serome Biosciences Inc.

Correspondence to: Songming Chen at songming.chen@ihvr.org

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Materials

Name	Company	Catalog Number	Comments
Biotinylated Concanavalin A	Vector Laboratories	BK-1000	ConA
Biotinylated Sambucus Nigra Lectin	Vector Laboratories	B-1305	SNA
Biotinylated Lens Culinaris Agglutinin	Vector Laboratories	BK-2000	LCA
Biotinylated Ricinus Communis Agglutinin I	Vector Laboratories	BK-1000	RCA
Biotinylated Aleuria Aurantia Lectin	Vector Laboratories	B-1395	AAL
Biotinylated Erythrina Cristagalli Lectin	Vector Laboratories	BK-3000	ECL
Biotinylated Griffonia (Bandeiraea) Simplicifolia Lectin II	Vector Laboratories	BK-3000	GSL II
Biotinylated Wheat Germ Agglutinin	Vector Laboratories	BK-1000	WGA
Biotinylated Phaseolus vulgaris Erythroagglutinin	Vector Laboratories	BK-2000	PHA-E
Biotinylated Phaseolus vulgaris Leucoagglutinin	Vector Laboratories	BK-2000	PHA-L
Biotinylated Peanut Agglutinin	Vector Laboratories	BK-1000	PNA
Biotinylated Pisum Sativum Agglutinin	Vector Laboratories	BK-2000	PSA
Biotinylated Dolichos Biflorus Agglutinin	Vector Laboratories	BK-1000	DBA
Biotinylated Datura Stramonium Lectin	Vector Laboratories	BK-3000	DSL
Biotinylated Sophora Japonica Agglutinin	Vector Laboratories	BK-2000	SJA
Biotinylated Soybean Agglutinin	Vector Laboratories	BK-1000	SBA
Biotinylated Solanum Tuberosum (Potato) Lectin	Vector Laboratories	BK-3000	STL
Biotinylated Griffonia (Bandeiraea) Simplicifolia Lectin I	Vector Laboratories	BK-2000	GSL I
Biotinylated Vicia Villosa Lectin	Vector Laboratories	BK-2000	VVL
Biotinylated Lycopersicon Esculentum (Tomato) Lectin	Vector Laboratories	BK-3000	LEL

Biotinylated Ulex Europaeus Agglutinin I	Vector Laboratories	BK-1000	UEA I
Biotinylated Jacalin	Vector Laboratories	BK-3000	JACALIN
Goat F(ab') ₂ Fragment anti-human IgM, Fc5 μ antibody	Jackson Immuno Research	109-006-129	IgM
Donkey F(ab') ₂ Frag anti-human IgG (H+L) antibody	Jackson Immuno Research	709-006-149	AB1
Mouse anti-human IgG F(ab') ₂ monoclonal antibody	Jackson Immuno Research	209-005-097	AB3
Goat anti-human alpha 2 macroglobulin polyclonal antibody	GeneTex	GTX62924	A2M
Rabbit anti-human alpha-1-antitrypsin polyclonal antibody	Lee Biosciences	CA1T-80A	A1AT
Mouse anti-human alpha-1-antitrypsin monoclonal antibody	Sigma-Aldrich	SAB4200198	A1AT
Rabbit anti-human alpha-1-antitrypsin polyclonal antibody	NeoMarkers	RB-367-A1	ACT
Rabbit anti-human alpha-1-antichymotrypsin polyclonal antibody	Fisher Scientific	RB9213R7	ACT
Mouse anti-human transferrin monoclonal antibody	GeneTex	GTX101035	Transferrin
Rabbit anti-human transferrin polyclonal antibody	GeneTex	GTX77130	Transferrin
Goat anti-human apolipoprotein J polyclonal antibody	Abcam	ab7610	ApoJ
Mouse anti-human GP73 monoclonal antibody	Abbott Laboratories	14H4-23	GP73
Mouse anti-human GP73 monoclonal antibody	SANTA CRUZ BIOTECHNOLOGY INC	sc-101275	GP73
Rabbit anti-human alpha-1 fetoprotein polyclonal antibody	GenWay	GWB-41C966	AFP
Mouse anti-human alpha-1 fetoprotein monoclonal antibody	Fitzgerald	10-A05A	AFP
Mouse anti-human hemopexin monoclonal antibody	Assaypro	60190-05011	Hemopexin
Mouse anti-human glypican-3(1G12) monoclonal antibody	Santa Cruz Bio	sc-65443	GPL3
Mouse anti-human Kininogen (LMW) monoclonal antibody	Assaypro	20333-05011	Kininogen
Rabbit anti-human MMP-21 monoclonal antibody	Epitomic	1955-1	MMP21
Mouse anti-human CEACAM-1 monoclonal antibody	R&D Systems	MAB1180	CEACAM
Rat anti-human DPPIV/CD26 monoclonal antibody	R&D Systems	MAB22441	DPPIV
Mouse anti-human PIVKA II monoclonal antibody	Crystal chem	8040	PIVICA
Mouse anti-carcin-mbryonic antigen	US biological	C1300	CEA
Mouse anti-CA125 Cancer Antigen	US biological	C0050-01D	CA125
Mouse anti -CA19-9 Cancer antigen	US biological	C0075-18	CA19-9

Mouse anti-Lewis x monoclonal antibody	Calbiochem	434631	Lewis X
Biotinylated BSA (positive control)	Home-made	N/A	Bio

Table 1. List of lectins and antibodies used in this protocol.

Non contact microarrayer	BioDot Inc	sciFLEXARRAYER	
384 microplate	Fisher Scientific	14-230-243	
FoodSaver	FoodSaver	V3835	
Ultrathin nitrocellulose coated microarray slides	Gentel	PATH	
Slide Imprinter (optional)	The Gel Company	WSP60-1	
Shaker	Fisher Scientific	15-453-211	
Centrifuge	Eppendorf	5804 000.013	
Slide washing basin/Slide Staining Dish with Removable Rack	Fisher Scientific	08-812	
Slide incubation chamber/microscope slide box	Fisher Scientific	03-448-5	
Brij 35, 30 w/v% solution in water	Acros Organics	AC32958-0025	
Tween-20	Fisher Scientific	P337-100	
Sodium Periodate (NaIO ₄)	Sigma-Aldrich	311448	
L-Glutamic acid γ-hydrazide	Sigma-Aldrich	G-7257	
Sodium Acetate Anhydrous (CH ₃ COONa)	Sigma-Aldrich	S2889	
Bovine Serum Albumin (BSA)	Lampire Biological Labs	7500804	
Phosphate Buffer Saline (PBS) (10X)	Denville Scientific	CP4390-48	
Dylight 549 conjugated NeutrAvidin	Thermo Fisher Scientific, Inc.	22837	
Protease Inhibitor Cocktail Tablets	Roche Group	4693159001	
ChromPure Human IgG, Fc fragment	Jackson ImmunoResearch	009-000-008	
ChromPure Human IgG, whole molecule	Jackson ImmunoResearch	009-000-003	
ChromPure Mouse IgG, whole molecule	Jackson ImmunoResearch	015-000-003	
ChromPure Mouse IgG, Fc fragment	Jackson ImmunoResearch	015-000-008	
ChromPure Rabbit IgG, whole molecule	Jackson ImmunoResearch	011-000-003	
ChromPure Donkey IgG, whole molecule	Jackson ImmunoResearch	017-000-003	
Microarray Scanner	Tecan Group Ltd.	LS Reloaded	

Table 2. List of equipments and reagents used in this protocol.