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ab272786
Lectin Array 70 – Array Map

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Lectin Array 70 Kit datasheet:
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For identification of the specific glycan binding proteins in serum, plasma, cell culture supernatants or cell/tissue lysates.

This product is for research use only and is not intended for diagnostic use.

Table of Contents

1. Overview

Lectin Array 70 (ab272786) uses standard glass slides each spotted with 14 wells of identical lectin arrays.

Lectins are glycan-binding proteins which have been purified from trees, beans and some fruits. They are highly specific for a given glycan based on their sequence and the different sugar unit structures the glycan contains. For Lectin Array 70 (ab272786) one standard glass slide is spotted with 14 identical lectin arrays, 1 in each well. Each lectin, together with the positive controls is arrayed in duplicate. The slide comes with a 16-well removable gasket which allows for the processing of 14 samples using one slide. Four slides can be nested into a tray, which matches a standard microplate and allows for automated robotic high-throughput processing of 56 arrays simultaneously. This array provides a powerful new tool for glycosylation determination, drug discovery and biomarker development; all with limited sample volumes required.

2. Lectin Array Map

Each lectin is spotted in duplicate horizonally												
	A	B	C	D	E	F	G	H	I	J	K	L
1	POS1	POS2	NEG	NEG	AAA	AAL						
2	ACG	ACL	ASA	BanLec	BC2L-A	BC2LCN						
3	BPA	Calsepa	CGL2	CNL	Con A	DBA						
4	Discoidin I	Discoidin II	DSA	ECA	EEL	F17AG						
5	Gal1	Gal1-S	Gal2	Gal3	Gal3C-S	Gal7-S						
6	Gal9	GNA	GRFT	GS-I	GS-II	HHA						
7	Jacalin	LBA	LcH	LEA	Lentil	Lotus						
8	LSL-N	MAA	Malectin	MOA	MPL	NPA						
9	Orysata	PA-IIL	PA-IL	PALa	PHA-E	PHA-L						
10	PHA-P	PNA	PPL	PSA	PSL1a	PTL						
11	RS-Fuc	SAMB	SBA	SJA	SNA-I	SNA-II						
12	STL	UDA	UEA-I	UEA-II	VFA	VVA						
13	WFA	WGA	NEG	NEG	POS2	POS1						

	Lectins	Abbreviation	Source	Carbohydrate specificity
1	*Anguilla anguilla*	AAA	*Anguilla anguilla* (Fresh Water Eel)	aFuc
2	*Aleuria aurantia*	AAL	*Aleuria aurantia* mushrooms	Fuca6GlcNAc
3	*Agrocybe cylindracea lectin*	ACG	E. coli expressed *Agrocybe cylindracea* galectin lectin	a2-3 Sialic Acid
4	*Amaranthus caudatus*	ACL, ACA	*Amaranthus caudatus* seeds	Galβ3GalNAc
5	*Allium sativum*	ASA	*Allium sativum* agglutinin (Garlic)	aMan
6	*Musa acuminata lectin*	BanLec	E. coli expressed *Musa acuminata*	Mannose, Glucose, branched high-mannose containing a1,3-glycoside bond
7	*Burkholderia cenocepacia lectin*	BC2L-A	E. coli expressed *Burkholderia cenocepacia*	High-mannose
8	*Burkholderia cenocepacia lectin*	BC2LCN (AiLecS1)	E. coli expressed *Burkholderia cenocepacia*	Fuca1-2Galβ1-3GalNAc (H type 3), Fuca1-2Galβ1-3GlcNAc (H type 1)
9	*Bauhinia purpurea*	BPA, BLP	*Bauhinia purpurea alba* (Camel's Foot Tree) seeds	Galβ3GalNAc
10	*Calystegia sepium lectin*	Calsepa	E. coli expressed Calystegia sepium	High-mannose
11	*Coprinopsis cinerea lectin*	CGL2	E. coli expressed *Coprinopsis cinerea*	βGal, GalNAca1-3Gal (Blood Group A), Gala1-3Gal (Blood Group B)
12	*Clitocybe nebularis lectin*	CNL	E. coli expressed *Clitocybe nebularis*	a/βGalNAc, GalNAcβ1-4GlcNAc, GalNAca1-3[Fuca1-2]Galβ1-4GlcNAc (Blood Group A)
13	Coanavalin A	Con A	*Coanavalia ensformis* (Jack Beans) seeds	aMan, aGlc
14	*Dolichos biflorus*	DBA	*Dolichos biflorus* (Horse Gram) seeds	aGalNAc
15	*Dictyostelium discoideum lectin*	Discoidin I	E. coli expressed *Dictyostelium discoideum*	aGalNAc (Tn antigen), LacNAc

	Lectins	Abbreviation	Source	Carbohydrate specificity
16	*Dictyostelium discoideum lectin*	Discoidin II	E. coli expressed *Dictyostelium discoideum*	Gal, LacNAc, Asialoglycans, Gal/GalNAcβ1-4GlcNAcβ1-6Gal/GalNAc
17	*Datura stramonium*	DSA, DSL	*Datura stramonium* (Thorn Apple, Jimson Weed) seeds	$(GlcNAc)_{2-4}$
18	*Erythrina cristagalli*	ECA, ECL	*Erythrina cristagalli* (Coral Tree) seeds	Galβ4GlcNAc
19	*Eunonymus europaeus*	EEL	*Eunonymus europaeus* (Spindle Tree) seeds	Gala3Gal
20	*E. coli* lectin	F17AG	E. coli expressed *E. coli*	GlcNAc
21	Human galectin1 lectin (stable form)	Gal1	E. coli expressed human galectin1 (stable form)	branched LacNAc, Gal
22	Human galectin1-S lectin	Gal1-S	E. coli expressed human galectin1-S	branched LacNAc
23	Human galectin2 lectin	Gal2	E. coli expressed human galectin2	GalNAca1-3Gal (Blood Group A), branched LacNAc
24	Human galectin3 lectin (full-length)	Gal3	E. coli expressed Human galectin3(full-length)	poly LacNAc
25	Human galectin 3C-S lectin	Gal3C-S	E. coli expressed Human galectin 3C-S	poly LacNAc
26	Human galectin7-S lectin	Gal7-S	E. coli expressed Human galectin7-S	Galβ1-3GlcNAc
27	Human galectin9 lectin (Stable Form)	Gal9	E. coli expressed human galectin9	poly LacNAc, GalNAca1-3Gal (Blood Group A)
28	*Galanthus nivalis*	GNA, GNL	*Galanthus nivalis* (Snowdrop) bulbs	aMan
29	*Griffithia sp. Lectin*	GRFT	E. coli expressed *Griffithia sp.*	High-mannose
30	*Griffonia (Banderaea) simplicifolia I*	GS-I, GSL-II, BSL-I	*Griffonia (Banderaea) simplicifolia* seeds	aGal, a3GalNAc

	Lectins	Abbreviation	Source	Carbohydrate specificity
31	*Griffonia (Brandeiraea)*	GS-II, GSL-II, BSL-II	*Griffonia (Banderaea) simplicifolia* seeds	α or βGlcNAc
32	*Hippeastrum hybrid*	HHA, HHL, AL	*Hippeastrum* hybrid (Amaryllis) bulbs	αMan
33	Jacalin	Jacalin, AIL	*Artocarpus integrifolia* (Jackfruit) seeds	Galβ3GalNAc
34	*Phaseolus lunatus*	LBA	*Phaseolus lunatus* (Lima Bean) seeds	GalNAcα(1,3)[αFuc(1,2]Gal
35	*Lens Culinaris*	LcH, LCA	*Lens culinaris*(lentil) seeds	αMan, αGlc
36	*Lycopersicon esculentum*	LEA, LEL, TL	*Lycopersicon esculentum* (tomato) fruit	$(GlcNAc)_{2-4}$
37	Lentil lectin	Lentil	*Lens culinaris* seeds	D-Mannose, D-glucose
38	*Lotus tetragonolobus*	Lotus, LTL	*Lotus tetragonolobus, Tetragonolobus purpreal*(Winged Pea, Asparagus Pea) seeds	αFuc
39	*Laetiporus sulphureus lectin*	LSL-N	E. coli expressed *Laetiporus sulphureus*	LacNAc, poly LacNAc
40	*Maackia amurensis I*	MAA, MAL, MAL-I	*Maackia amurensis* seeds	Galβ4GlcNAc
41	Human malectin lectin	Malectin	E. coli expressed human malectin	Glc_2-*N*-biose
42	*Marasmius oreades lectin*	MOA	E. coli expressed *Marasmius oreades*	Gala1-3[Fuca1-2]Galβ1-4GlcNAc (Blood Group B) Gala1-3Galβ1-4GlcNAc, Gala1-3Gal
43	*Maclura pomifera*	MPL, MPA	*Maclura pomifera* (Osage Orange) seeds	Galβ3GalNAc
44	*Narcissus pseudonarcissus*	NPA, NPL, DL	*Narcissus pseudonarcissus*(Daffodil) bulbs	αMan
45	*Oryza sative lectin*	Orysata	E. coli expressed *Oryza sative*	High-mannose
46	*Pseudomonas aeruginosa*	PA-IIL	E. coli expressed *Pseudomonas*	Fucose, Fucose containing

	Lectins	Abbreviation	Source	Carbohydrate specificity
	lectin		*aeruginosa*	oligosaccharides, Mannose
47	*Pseudomonas aeruginosa lectin*	PA-IL	E. coli expressed *Pseudomonas aeruginosa*	Gala1-3(4)Gal
48	*Phlebodium aureum lectin*	PALa	E. coli expressed *Phlebodium aureum*	High-mannose
49	*Phaseolus vulgaris Erythroagglutinin*	PHA-E	*Phaseolus vulgaris Erythroagglutinin*(Red Kidney Bean) seeds)	Galβ4GlcNAcβ2Mana6(GlcNAcb4)(GlcNAcβ4Mana3)Manβ4
50	*Leucoagglutinin*	PHA-L	*Phaseolus vulgaris Erythroagglutinin*(Red Kidney Bean) seeds)	Galβ4GlcNAcβ6(GlcNAcβ2Mana3)Mana3
51	Phaseolus vulgaris agglutinin	PHA-P	*Phaseolus vulgaris Erythroagglutinin*(Red Kidney Bean) seeds)	Galβ4GlcNAcβ2Mana6(GlcNAcb4)(GlcNAcβ4Mana3)Manβ4, Galβ4GlcNAcβ6(GlcNAcβ2Mana3)Mana3
52	Peanut	PNA	Arachis hypogaea *Peanut*	Galβ3GalNAc
53	*Pleurocybella porrigens lectin*	PPL	E. coli expressed Pleurocybella porrigens	α/βGalNAc
54	*Pisum sativum*	PSA, PEA	*Pisum sativum* (Pea) seeds	αMan, αGlc
55	*Polyporus squamosus lectin*	PSL1a	E. coli expressed *Polyporus squamosus*	α2-6 Sialic Acid
56	*Psophocarpus*	PTL, PTL-I, WBA-I	*Psophocarpus tretragonoiobus* (Winged Bean) seeds	GalNAc, Gal
57	*Ralstonia solanacearum lectin*	RS-Fuc	E. coli expressed *Ralstonia solanacearum*	Fucose
58	Sambucus Sieboldiana Lectin	SAMB	Japanese elderberry	NeuAcα2-6Gal/GalNAc
59	Soybean	SBA	*Glycine max* (Soybean) seeds	α > βGalNAc
60	*Sophora japonica*	SJA	*Sophora japonica* (Japanese Pagoda Tree) seeds	βGalNAc

	Lectins	Abbreviation	Source	Carbohydrate specificity
61	*Sambucus nigra I*	SNA-I	*Sambucus nigra* (Elderberry) bark	NANAa(2,6)GalNAc > GalNAc = Lac > GalNANAa(2,6)Gal
62	*Sambucus nigra II*	SNA-II	*Sambucus nigra* (Elderberry) bark	GalNAc > Gal
63	*Solanum tuberosum*	STL, PL	*Solanum tuberosum,* (potato) tubers	$(GlcNAc)_{2-4}$
64	*Urtica dioica*	UDA	*Urtica dioica* (Stinging Nettle) seeds	GlcNAc
65	*Ulex europaeus I*	UEA-I	*Ulex europaeus* (Furze Gorse) seeds	aFuc
66	*Ulex europaeus II*	UEA-II	*Ulex europaeus* (Furze Gorse) seeds	Poly β(1,4)Gl cNAc
67	*Vicia faba*	VFA	*Vicia faba* (Fava Bean) seeds	aMan
68	*Vicia villosa*	VVA, VVL	*Vicia villosa* (Hairy Vetch) seeds	GalNAc
69	*Wisteria floribunda*	WFA	*Wisteria floribunda* (Japanese Wisteria) seeds	GalNAc
70	Wheat Germ	WGA	*Triticum volganis* (Wheat Germ)	GlCNAc

Sugar Abbreviations:

Fuc: L-Fucose
Gal: D-Galactose
GalNAc: N-Acetylglactosamine
Glc: D-Glucose
GlcNAc: N-Acetylglucosamine
Lac: Lactose
Man: Mannose

3. Notes

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