

# Lectin Selection Guide

Find the right lectins for your research



Species	Abbreviation	Carbohydrate Specificity	Product Number	Conjugates	Blood Group Specificity	Mitogenicity	Leukoagglutinin <sup>1</sup>	Erythroagglutinin <sup>1</sup>	MQ Level	Suitability/ Application	Reference	
<i>Arachis hypogaea</i> (peanut)	PNA	Galβ1-3GalNAc >> Galβ1-4GlcNAc > Gal and Galβ1-3GlcNAc	L6135	Biotin	T-cells, O <sup>f</sup>	+			200		1,2,3	
			L7381	FITC	T-cells, O <sup>f</sup>	+			200		1,2,3	
			L7759	Peroxidase	T-cells, O <sup>f</sup>	+			200		1,2,3	
			L0881	None	T-cells, O <sup>f</sup>	+			200	Affinity purified	1,2,3	
<i>Artocarpus heterophyllus</i> (jackfruit)	Jacalin	Galβ1-3GalNAc, mannose/ high-mannose, galactose, complex N-glycans	SRP6176	None	T-cells	+			None		4	
<i>Bandeiraea simplicifolia</i> (Griffonia simplicifolia)	GSI-B <sub>4</sub> (aka BSI-B <sub>4</sub> )	α-Gal	L2140	Biotin	B <sup>e</sup>	-		+	200	Isolectin B <sub>4</sub>	1,5,6	
			L2895	FITC	B <sup>e</sup>	-		+	200	Isolectin B <sub>4</sub>	1,5,6	
			L5391	Peroxidase	B <sup>e</sup>	-		+	200	Isolectin B <sub>4</sub>	1,5,6	
			L3019	None	B <sup>e</sup>	-		+	300	Isolectin B <sub>4</sub>	1,5,6	
	GSI (aka BSI)	α-Gal > α-GalNAc	L9381	FITC	A, B	-		+	200		1,5,6	
			L2380	None	A, B	-		+	200		1,5,6	
<i>Canavalia ensiformis</i> (jack bean)	Con A	α-Man, α-Glc, high-mannose	C7555	Agarose		+ <sup>c</sup>	-		200			1,7
			C2272	Biotin		+ <sup>c</sup>	-		200			1,7
			C7642	FITC		+ <sup>c</sup>	-		200			1,7
			L6397	Peroxidase		+ <sup>c</sup>	-		200			1,7
			C9017	Sepharose®		+ <sup>c</sup>	-		200			1,7
			L3885	Succinyl		+ <sup>c</sup>	-		200			1,7
			61760	None		+ <sup>c</sup>	-		100			1,7
			234567M	None		+ <sup>c</sup>	-		100			1,7
			C5275	None		+ <sup>c</sup>	-		200	Aseptically processed for cell culture		1,7
			C0412	None		+ <sup>c</sup>	-		200	γ-irradiated for cell culture		1,7
			L7647	None		+ <sup>c</sup>	-		200			1,7
C2010	None		+ <sup>c</sup>	-		300			1,7			
<i>Dolichos biflorus</i> (horse gram)	DBA	α-GalNAc, Forssman	L6533	Biotin	A <sup>g</sup>	-		+	200	Buffered aqueous solution	1,6	
			L2785	None	A <sup>g</sup>	-		+	300		1,6	
<i>Erythrina cristagalli</i> (coral tree)	ECA	Galβ1-4/3GlcNAc	L5390	None		+ <sup>c</sup>	-	+	200		8,9	
<i>Galanthus nivalis</i> (snowdrop)	GNL/GNA	High-mannose N-glycans	L8775	Agarose	Rabbit erythrocytes			+	200		4	
			L8275	None	Rabbit erythrocytes			+	200		4	
<i>Glycine max</i> (soybean)	SBA	Terminal GalNAc > Gal	L1395	None		+ <sup>c</sup>	-	-	200		1,2,5	
<i>Helix pomatia</i> (snail)	HPA	Terminal GalNAc	L6512	Biotin	A			+	200		1	
			L3382	None	A			+	200		1	
<i>Homo sapiens</i>	Gal-1	β-Gal	G7420	None					200		10	
			G5170	None					200		10	
			SRP6373	None						None		10
			SRP4647	None						None		10
			SRP6374	None						None		10,11
<i>Lens culinaris</i> (lentil)	LCA/LcH	Core Fuc (Fuca1-6), terminal α-Man	L0511	Sepharose®		+			200		1,2,12	
			L1277	None		+			200		1,2,12	
<i>Lycopersicon esculentum</i> (tomato)	LEA	Poly-GlcNAc/ LacNAc (chitin)	L0401	FITC		- <sup>h</sup>	-	+	200		1,13	
<i>Phaseolus vulgaris</i> (red kidney bean)	PHA	Oligosaccharide	61764	None		+	+	+	100			
			PHA-E	Bisecting GlcNAc w/type 2 LacNAc	L8629	None			Low		+	300
	PHA-L	β1-6 branched N-glycans	431784	None		+	+	+	100			1
			L4144	None		+	+	+	200	For cell culture		1
			L2769	None		+	+	+	200			1
			L8902	None		+	+	+	200	For cell culture		
	PHA-M	Oligosaccharide	L2646	None		+	+	+	300			
			L1668	None		+	+	+	200	For cell culture		
	PHA-P	Oligosaccharide	L8754	None		+	+	+	200			
			L9017	None		+	+	+	300	Affinity purified		
L8777			None	T, B-cells	+			200	For cell culture		1	
<i>Phytolacca americana</i> (pokeweed)	PWM	Poly-GlcNAc (chitin)	L9379	None	T, B-cells	+		200		1		
<i>Pisum sativum</i> (pea)	PSA	Core Fuc (Fuca1-6), terminal α-Man	L0770	FITC		+			200		1,12	
			L5380	None		+			200		1,12	
<i>Pseudomonas aeruginosa</i>	PA-I, PA-IL, or LecA	Gala	L9895	None		+			200		1	
			61768	Agarose		- <sup>j</sup>			100			14,15,16
<i>Triticum vulgare</i> (wheat germ)	WGA	(GlcNAc) <sub>2</sub> , NeuNAc	L1882	Agarose		- <sup>j</sup>			200	>0.1 mg/mL binding capacity		14,15,16
			L1394	Agarose		- <sup>j</sup>			200	>0.5 mg/mL binding capacity		14,15,16
			L5142	Biotin		- <sup>j</sup>			200			14,15,16
			L4895	FITC		- <sup>j</sup>			200			14,15,16
			L3892	Peroxidase		- <sup>j</sup>			200			14,15,16
			61767	None		- <sup>j</sup>			100	GE assayed		14,15,16
			L0636	None		- <sup>j</sup>			200			14,15,16
			L9640	None		- <sup>j</sup>			300			14,15,16
			L8262	Biotin	Type 2 H	-			200			1,6
<i>Ulex europaeus</i> (gorse, furze)	UEA-I	Fuca1-2Galβ1-4GlcNAc/Gal, Lewis <sup>y</sup>	L9006	FITC	Type 2 H	-			200		1	
			L8146	Peroxidase	Type 2 H	-			200		1	
			L5505	None	Type 2 H	-			200		1	
			L1516	Biotin	A				+	200	Buffered aqueous solution	1
<i>Wisteria floribunda</i>	WFA	Terminal GalNAc, LacNAc <sup>d</sup>	L8258	None	A			+	200		1	

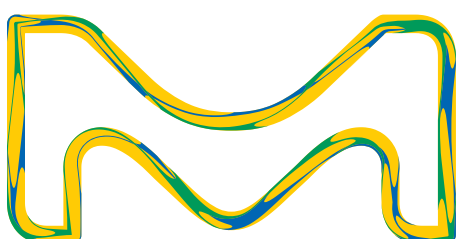
## Footnotes:

- Mitogenic for neuraminidase-treated lymphocytes
- Inhibits mitogenic activity of PHA
- Non-agglutinating and mitogenic
- More rare, only for specific structures, see references for more detail
- Isolectin B<sub>4</sub> enriched for specificity against Blood Type B, but some Type A agglutination activity may be present
- Agglutinates neuraminidase-treated O-type RBCs
- Stronger binding to Forssman antigen than blood group A
- Has anti-mitogenic activity
- If empty, lectin may have agglutinating activities, but may not be characterized or is not specific to erythrocytes or leukocytes
- Not considered mitogenic, but will induce cytokine production

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