

Description

LEctPROFILE® gels are affinity chromatography where lectins are immobilized on a Sepharose 4B fast flow matrix. Glycoconjugates can be recovered by competition with the specific inhibitory monosaccharide of the lectin (i.e. 0,1 – 0,5 M of monosaccharides) or by acidic elution (i.e. Glycine/HCl, 50 mM, pH 3,5). LEctPROFILE® gels are used for the purification of glycoconjugates^{1,2} with specific N-glycan residues. LEctPROFILE® gel are personalized reagents produced on your request (see *the list of available naturals and recombinants lectins, Tables 1 and 2*) in 1, 2 or 5 mL. LEctPROFILE® gel shows high binding capacity (over 1 mg per mL) and high specificity carefully controlled by standardized protocol which guarantee a total reliability.



Scheme 1. LEctPROFILE® gel matrix.

List of LEctPROFILE® gels (natural lectins)

Reference	Lectin	Common Name
LG1222	ABA	<i>Agaricus Bisporus</i>
LG1221	AIA/Jacalin	<i>Artocarpus intergrifolia</i>
LG1367	AML	<i>Astragalus membranaceus</i>
LG1205	ASA	<i>Allium sativum agglutinin</i>
LG1889	BanLec	<i>Musa acuminata</i>
LG1209	BPA	<i>Bauhinia purpurea</i>
LG1254	CJA	<i>Crotalaria juncea</i>
LG1366	cMOL	<i>Moringa oleifera</i>
LG1201	ConA	<i>Canavalia ensiformis</i>
LG1249	CorM	<i>Coregonus lavaretus marenae</i>
LG1211	DBA	<i>Dolichos biflorus</i>
LG1206	GNA	<i>Galanthus nivalis</i>
LG1202	LcH	<i>Lens culinaris</i>
LG1252	NPA	<i>Narcissus pseudonarcissus Daffodil</i>
LG1236	MAA	<i>Maackia amurensis</i>
LG1242	MOA	<i>Marasmius oreades agglutinin</i>
LG1240	PHA-E	<i>Phaseolus vulgaris</i>
LG1239	PHA-L	<i>Phaseolus vulgaris</i>
LG1223	PNA	<i>Arachis hypogaea</i>
LG1203	PSA	<i>Pisum sativum</i>
LG1216	SBA	<i>Glycine max</i>
LG1237	SNA	<i>Sambucus nigra</i>
LG1476	TJA-II	<i>Trichosanthes japonica agglutinin II</i>
LG1261	TXLC-I	<i>Tulipa gesneriana agglutinin</i>
LG1234	UEA-I	<i>Ulex europaeus II</i>
LG1229	UEA-II	<i>Ulex europaeus II</i>
LG1253	VEA	<i>Vicia ervilia</i>
LG1204	VFA	<i>Vicia faba</i>
LG1219	WFA	<i>Wisteria floribunda</i>
LG1230	WGA	<i>Triticum vulgare</i>

Table 1. Lists of naturals lectins available for the LEctPROFILE® gel.

List of LEctPROFILE® gels (recombinant lectins)

Reference	Lectin	Common Name
LG1255	BC2L-A	<i>Burkholderia cenocepacia lectin A</i>
LG1256	BC2L-C	<i>Burkholderia cenocepacia lectin C (N terminal domain)</i>
LG1688	FimH	<i>Escherichia Coli Adhesin FimH</i>
LG2094	HPyL	<i>Human Polyomavirus 9 VP1</i>
LG1257	PA-IL	<i>Pseudomonas aeruginosa lectin A</i>
LG1259	PA-IIL	<i>Pseudomonas aeruginosa lectin B (Lec B)</i>
LG2095	RPL- α Gal	<i>Recombinant Prokaryotic Lectin Fuc1</i>
LG1579	RPL-Gal1	<i>Recombinant Prokaryotic Lectin αGal</i>
LG1580	RPL-Gal2	<i>Recombinant Prokaryotic Lectin Gal1</i>
LG1581	RPL-Gal3	<i>Recombinant Prokaryotic Lectin Gal2</i>
LG1582	RPL-Gal4	<i>Recombinant Prokaryotic Lectin Gal3</i>
LG1583	RPL- α Man	<i>Recombinant Prokaryotic Lectin Gal4</i>
LG1584	RPL-Man2	<i>Recombinant Prokaryotic Lectin αMannose</i>
LG2096	RPL-Sia1	<i>Recombinant Prokaryotic Lectin Man2</i>
LG2097	RPL-Sia2	<i>Recombinant Prokaryotic Lectin Sia1</i>
LG2098	RPL-Sia3	<i>Recombinant Prokaryotic Lectin Sia2</i>
LG2099	RPL-Fuc1	<i>Recombinant Prokaryotic Lectin Sia3</i>
LG1258	RSL	<i>Ralstonia solanacearum</i>

Table 2. Lists of recombinants lectins available for the LEctPROFILE® gel.

Applications

LEctPROFILE® gel is used for :

- Separation of various family of glycoconjugates (e.g. polysaccharides, glycoproteins, ...);
- Extraction of glycoconjugates from natural sources ;
- Purification of recombinant therapeutic proteins ;
- Enrichment of glycoproteins contained in biological samples (e.g. sialic acids studies).

References

1. Misaki, A., Kakuta, M., Meah, Y., Goldstein, I. J. *J. Biol. Chem.* **1997**, 272, 25455-25461.
2. Sueyoshi, S., Tsuji, T., Osawa, T., *Biol. Chem. Hoppe-Seyler*, **1985**, 366, 213-221.