

## **SUPPLEMENTARY INFORMATION**

### **Exploring the potentiality of a plant platform for monoclonal antibody production in veterinary medicine**

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**Type of paper:** Article

**Table S1. Relative proportions of detected glycoforms.**

	M1 WT	M1 $\Delta$ XF	Lokivetmab
Notglyc	4.93%	3.53%	0.79%
Man5	7.33%	6.45%	0.65%
Man6	4.59%	4.33%	0.08%
Man7	11.69%	11.45%	0.04%
Man8	11.76%	13.29%	0.10%
Man9	8.74%	8.46%	0.01%
Man9+Hex	0.43%	0.34%	0.00%
Man5Gn	0.55%	8.01%	0.02%
Man5Gn+1xHex	0.18%	0.84%	0.00%
GnUF	0.13%		2.22%
MMF	0.36%		0.12%
MGnF	0.89%		5.74%
GnGnF	8.93%		78.87%
AMF	0.51%		0.15%
AGnF	4.41%		3.82%
AAF	1.79%		0.12%
MM	0.12%	0.19%	0.06%
GnM	0.85%	5.28%	1.22%
GnGn	12.58%	30.51%	5.42%
AGn	0.46%	2.69%	0.52%
AA	0.19%	0.29%	0.02%
MMXF	0.63%		
GnMXF	1.68%		
GNGNXF	15.86%		
Man4Gn/AM	0.40%	4.35%	0.04%

(a)



(b)

SP-Variable light chain lokivetmab - constant  $\lambda$



SP-variable heavy - const Heavy



Figure S1. Schematic representation of the constructs used in this study. cIL-31 (Plant) (a) and M1 (b). SP stands for signal peptide

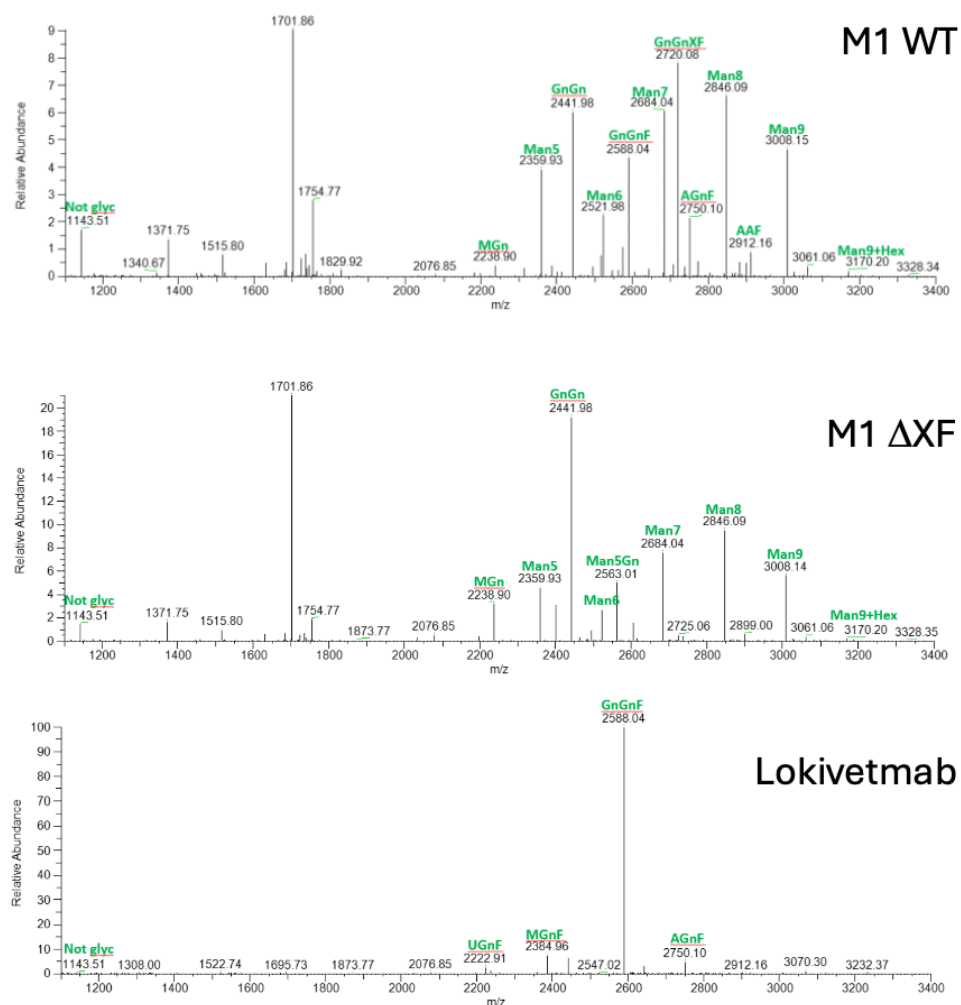


Figure S2. Liquid chromatography mass spectrometry (LC/MS) analysis illustrating the N-glycosylation profiles of the heavy chain peptide EEQFNGTYR (mass: 1143.51 Da) from plant produced M1 antibodies (WT,  $\Delta$ XF) and lokivetmab produced in CHO.

Raw data of the Western Blot presented in the main text body.  
Figure 1.



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LANE AND BAND ANALYSIS DATA TABLE

Frame 1 Channel 1

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	9290710	600	1954460	0.135	15484	1.909
2	30052000	1092	14851400	0.184	27520	14.502
3	65654900	1320	42728400	0.298	49739	41.724
4	15800000	602	1795900	0.352	26246	1.754
5	15154900	660	4714130	0.389	22962	4.603
6	12583100	855	895047	0.430	14717	0.874
7	27348200	572	15432700	0.510	47812	15.070
8	47067000	1050	18562700	0.557	44826	18.127
9	3630170	574	1471620	0.917	6324	1.437

Lane 2

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	23635200	1014	11367900	0.187	23309	19.981
2	33125000	697	17186100	0.285	47525	30.207
3	21597400	533	6612800	0.321	40520	11.623
4	14033300	640	1489590	0.355	21927	2.618
5	11129300	520	3855940	0.391	21402	6.777
6	12950500	984	1237240	0.435	13161	2.175
7	18486300	480	11191900	0.508	38513	19.672
8	19891500	840	3952330	0.549	23680	6.947

Lane 4

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	22849100	1073	12985000	0.549	21295	100

Lane 5

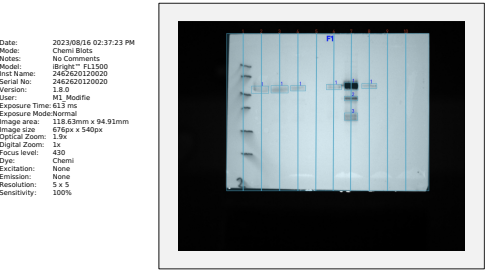
Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	16515400	858	8190650	0.567	19249	94.185
2	1840000	216	505665	0.904	8518	5.815

Lane 6

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	5554480	1008	2497560	0.023	5510	11.623
2	29785800	1170	18990800	0.578	25458	88.377

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Figure 2.



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LANE AND BAND ANALYSIS DATA TABLE

Frame 1 Channel 1  
Lane 2

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	1396870	798	991483	0.356	1750	100

Lane 3

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	2209440	798	1712310	0.353	2768	100

Lane 4

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	1184410	555	946748	0.348	2134	100

Lane 6

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	1471140	555	792614	0.340	2650	100

Lane 7

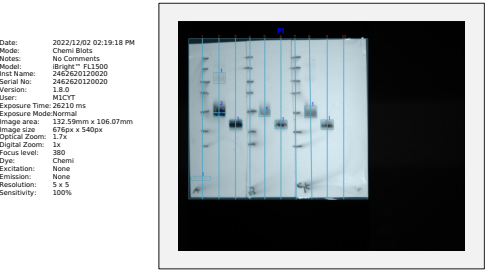
Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	16426400	700	13634300	0.334	23466	72.858
2	3506970	442	2433190	0.412	7934	13.002
3	3794800	680	2645970	0.526	5580	14.139

Lane 8

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	1172830	532	922622	0.332	2204	100

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Figure 3.



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LANE AND BAND ANALYSIS DATA TABLE

Frame 1 Channel 1

Lane 1

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	616120	576	415416	0.865	1069	100

Lane 2

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	2690250	840	2100610	0.241	3202	13.014
2	15717900	589	8178460	0.434	26686	50.669
3	10116700	341	5861920	0.471	29668	36.317

Lane 3

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	20076700	660	16976000	0.529	30419	100

Lane 5

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	5480280	464	3597060	0.463	11811	100

Lane 6

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	10404300	672	8877920	0.534	15482	100

Lane 8

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	11872200	960	10154800	0.452	12367	100

Lane 9

Band ID	Volume	Area	Local Bg. Corr. Vol.	Rf	Density	Band Purity %
1	11162300	768	10216800	0.532	14534	100