

**Supplementary Table 1. Glycopeptide composition from site Asn<sup>361</sup> of JRFL gp140 ΔCF in MALDI-MS analysis**

Experimental <i>m/z</i>	Theoretical <i>m/z</i>	Peptide Sequence	Glycan	Mod*
2280.1011	2279.9760	LREQFENK	[Hex]5[HexNAc]2	
2305.1516	2305.0077	LREQFENK	[Hex]3[HexNAc]3[Fuc]1	
2321.0869	2321.0026	LREQFENK	[Hex]4[HexNAc]3	
2333.1572	2333.0026	LREQFENK	[Hex]3[HexNAc]3[Fuc]1	For*
2362.1829	2362.0291	LREQFENK	[Hex]3[HexNAc]4	
2442.1592	2442.0289	LREQFENK	[Hex]6 [HexNAc]2	
2467.1931	2467.0605	LREQFENK	[Hex]4[HexNAc]3[Fuc]1	
2483.1245	2483.0554	LREQFENK	[Hex]5 [HexNAc]3	
2508.2285	2508.0870	LREQFENK	[Hex]3[HexNAc]4[Fuc]1	
2522.2522	2522.1027	LREQFENK	[Hex]3[HexNAc]4[Fuc]1	Methyl*
2536.0000	2536.0819	LREQFENK	[Hex]3[HexNAc]4[Fuc]1	For
2550.2400	2550.0976	LREQFENK	[Hex]3[HexNAc]4[Fuc]1	Methyl, for
2579.2327	2579.1243	LREQFENK	[Hex]3[HexNAc]5	Methyl
2604.2131	2604.0817	LREQFENK	[Hex]7[HexNAc]2	
2629.2461	2629.1133	LREQFENK	[Hex]5[HexNAc]3[Fuc]1	
2645.1660	2645.1082	LREQFENK	[Hex]6[HexNAc]3	
2657.2720	2657.1082	LREQFENK	[Hex]5[HexNAc]3[Fuc]1	For
2670.2849	2670.1399	LREQFENK	[Hex]4[HexNAc]4[Fuc]1	
2711.3184	2711.1665	LREQFENK	[Hex]3[HexNAc]5[Fuc]1	
2725.3306	2725.1822	LREQFENK	[Hex]3[HexNAc]5[Fuc]1	Methyl
2739.3049	2739.1614	LREQFENK	[Hex]3[HexNAc]5[Fuc]1	For
2766.0000	2766.1345	LREQFENK	[Hex]8[HexNAc]2	
2791.2639	2791.1661	LREQFENK	[Hex]6[HexNAc]3[Fuc]1	
2832.3469	2832.1927	LREQFENK	[Hex]5[HexNAc]4[Fuc]1	
2860.3462	2860.1876	LREQFENK	[Hex]5[HexNAc]4[Fuc]1	For
2873.3057	2873.2192	LREQFENK	[Hex]4[HexNAc]5[Fuc]1	
2887.3701	2887.2349	LREQFENK	[Hex]4[HexNAc]5[Fuc]1	Methyl
2914.3931	2914.2459	LREQFENK	[Hex]3[HexNAc]6[Fuc]1	
2928.3909	2928.2616	LREQFENK	[Hex]3[HexNAc]6[Fuc]1	Methyl
2942.3958	2942.2030	LREQFENK	[Hex]9[HexNAc]2	Methyl
2971.2974	2971.1931	LREQFENK	[Hex]9[HexNAc]2	U*
3035.3062	3035.2721	LREQFENK	[Hex]5[HexNAc]5[Fuc]1	
3053.4321	3053.2462	LREQFENK	[Hex]7[HexNAc]4	U
3063.3503	3063.2670	LREQFENK	[Hex]5[HexNAc]5[Fuc]1	For
3090.4238	3090.2401	LREQFENK	[Hex]10[HexNAc]2	
3197.4680	3197.3249	LREQFENK	[Hex]6[HexNAc]5[Fuc]1	For
3225.4272	3225.3198	LREQFENK	[Hex]6[HexNAc]5[Fuc]1	
3282.4448	3282.3413	LREQFENK	[Hex]6[HexNAc]6	For

\*Mod: modification on peptide moieties; For: Formylation; Methyl: methylation; U: Carbamylation;