

A recombinant human LOXL2 secreted from HEK cells displays complex, acidic glycans at all three predicted *N*-glycosylation sites.

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Table of contents: Table S1: All glycoforms detected in this study and their fractional abundances, not accounting for differences in ionization efficiency (pages S2 and S3).

Table S1. N-linked Glycopeptide Compositions of hLOXL2

Charge State	Experimental m/z	Theoretical m/z	Mass Error (ppm)	Peptide Sequence	Glycan	Relative Abundance (%)
4+	1072.7286	1072.7251	3	N ²⁸⁸ VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]4[Fuc]1	4.5
4+	1400.6481	1400.6438	3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]4[Fuc]2	1.1
4+	1487.6726	1487.6730	0.3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]5[Fuc]1[NeuAc]1	1.4
4+	1451.4153	1451.4136	1	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]5[Fuc]2	3.0
4+	1465.6632	1465.6690	4	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]6[Fuc]1	0.7
4+	1538.7025	1538.6979	3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]6[Fuc]1[NeuAc]1	18.3
4+	1485.6614	1485.6582	2	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]6[Fuc]1[SO3]1	6.5
4+	1502.1877	1502.1834	3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]6[Fuc]2	20.4
4+	1574.9662	1574.9573	6	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]6[Fuc]2[NeuAc]1	5.9
4+	1522.1781	1522.1727	4	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]6[Fuc]2[SO3]1	16.2
4+	1477.4117	1477.4163	3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]4[Fuc]1[NeuAc]1	0.6
4+	1455.4130	1455.4123	1	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]5[Fuc]1	0.1
4+	1528.1853	1528.1862	1	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]5[Fuc]1[NeuAc]1	4.9
4+	1564.7021	1564.7006	1	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]5[Fuc]2[NeuAc]1	3.1
4+	1506.1901	1506.1822	5	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]6[Fuc]1	0.1
4+	1526.1716	1526.1714	0.1	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]6[Fuc]1[SO3]1	0.2
4+	1588.6962	1588.6886	5	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]5[HexNAc]5[Fuc]1[NeuAc]1[SO3]1	0.4
4+	1623.7180	1623.7231	3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]6[HexNAc]6[Fuc]2	0.7
5+	1132.1176	1132.1208	3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]5[Fuc]1	1.2
5+	1204.7256	1204.7194	5	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]3[HexNAc]6[Fuc]1[SO3]2	6.8
5+	1153.1267	1153.1270	0.3	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]4[Fuc]2	0.8
5+	1193.7418	1193.7429	1	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]5[Fuc]2	4.1
5+	1238.7471	1238.7418	4	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]5[Fuc]1[NeuAc]1[SO3]1	1.1
5+	1280.9771	1280.9695	6	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]5[Fuc]1[NeuAc]2	1.1
5+	1180.5286	1180.5227	5	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]4[HexNAc]5[Fuc]1[SO3]1	0.2
5+	1172.3224	1172.3174	4	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]5[HexNAc]4[Fuc]1[SO3]1	0.8
5+	1185.5360	1185.5376	1	LGPQVSLDPMK ^{N288} VTCEGLPAVVSCVPGQVFSPDGPSR	[Hex]5[HexNAc]4[Fuc]2	0.2
3+	1457.3060	1457.2999	4	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]3[HexNAc]5[Fuc]1	5.3
3+	1505.9863	1505.9859	0.3	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]3[HexNAc]5[Fuc]2	9.7
3+	1573.6813	1573.6790	1	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]3[HexNAc]6[Fuc]2	25.0
3+	1622.0174	1622.0248	5	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]3[HexNAc]6[Fuc]1[NeuAc]1	24.2
3+	1511.3259	1511.3175	6	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]4[HexNAc]5[Fuc]1	1.0
3+	1560.0069	1560.0035	2	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]4[HexNAc]5[Fuc]2	16.8
4+	1206.7733	1206.7689	4	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]4[HexNAc]5[Fuc]1[NeuAc]1	7.8
4+	1243.0329	1243.0283	4	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]4[HexNAc]5[Fuc]2[NeuAc]1	8.1
4+	1174.2564	1174.2532	3	N ⁴⁵⁵ GSLVWGMVCGQN ^{N644} WGIVEAMVVCR	[Hex]5[HexNAc]5[Fuc]1	2.3
4+	915.9106	915.9066	4	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]3[Fuc]1	0.4
4+	966.6808	966.6764	5	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]4[Fuc]1	2.3
4+	1003.1958	1003.1909	5	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]4[Fuc]2	1.2
4+	1017.4516	1017.4463	5	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]5[Fuc]1	2.0
4+	1090.2236	1090.2201	3	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]5[Fuc]1[NeuAc]1	5.3
4+	1037.4426	1037.4355	7	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]5[Fuc]1[SO3]1	0.4
4+	1053.965	1053.9607	4	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]5[Fuc]2	1.7
4+	1068.2212	1068.2161	5	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]6[Fuc]1	1.6
4+	1088.2112	1088.2053	5	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]6[Fuc]1[SO3]1	2.9
4+	1108.2011	1108.1945	6	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]6[Fuc]1[SO3]2	2.0
4+	1104.7353	1104.7306	4	HYHSMVFTHYDLLN ^{N644} GTK	[Hex]3[HexNAc]6[Fuc]2	22.9

Charge State	Experimental m/z	Theoretical m/z	Mass Error (ppm)	Peptide Sequence	Glycan	Relative Abundance (%)
4+	1177.5089	1177.5044	4	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]3[HexNAc]6[Fuc]2[NeuAc]1	3.3
4+	1124.723	1124.7198	3	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]3[HexNAc]6[Fuc]2[SO3]1	6.4
4+	1140.9941	1140.9899	4	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]3[HexNAc]6[Fuc]1[NeuAc]1	21.8
4+	1007.1946	1007.1896	5	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]4[Fuc]1	0.4
4+	1079.9678	1079.9635	4	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]4[Fuc]1[NeuAc]1	1.2
4+	1043.7058	1043.7041	2	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]4[Fuc]2	0.4
4+	1057.9654	1057.9594	6	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]5[Fuc]1	0.9
4+	1130.7392	1130.7333	5	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]5[Fuc]1[NeuAc]1	8.8
4+	1150.7282	1150.7225	5	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]5[Fuc]1[NeuAc]1[SO3]1	0.5
4+	1077.9540	1077.9510	3	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]5[Fuc]1[SO3]1	1.1
4+	1094.4782	1094.4739	4	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]5[Fuc]2	4.2
4+	1167.2514	1167.2478	3	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]5[Fuc]2[NeuAc]1	1.6
4+	1114.2047	1114.2080	3	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]5[NeuAc]1[SO3]1	0.1
4+	1181.5099	1181.5032	6	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]6[Fuc]1	1.5
4+	1181.5099	1181.5032	6	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]4[HexNAc]6[Fuc]1[NeuAc]1	0.6
4+	1047.7068	1047.7028	4	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]5[HexNAc]4[Fuc]1	0.2
4+	1120.4841	1120.4767	7	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]5[HexNAc]4[Fuc]1[NeuAc]1	3.0
4+	1084.2143	1084.2173	3	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]5[HexNAc]4[Fuc]2	0.1
4+	1098.4751	1098.4727	2	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]5[HexNAc]5[Fuc]1	0.4
4+	1149.2398	1149.2425	2	HYHSMEVFTHYDLLNLN ⁶⁴⁴ GTK	[Hex]5[HexNAc]6[Fuc]1	0.1