

## SUPPLEMENTAL TABLES

### TABLE S1

#### Crystallographic data collection and refinement statistics

<b>PDB code</b>	2WNP
<b>Data collection</b>	
ESRF beamline	BM30
Resolution shell (Å)	50-1.21 (1.241.21)
Observed reflections	531,861 (1,245)
Unique reflections	54,807 (410)
Redundancy	9.7 (3)
Completeness (%)	72 (7.3)
I/SigI	28.27 (2.37)
Rsym (%)	4.4 (49)
<b>Data refinement</b>	
Resolution high/low Å	20-1.21 (1.2571.214)
<i>R</i> <sub>work</sub> / <i>R</i> <sub>free</sub> (%)	17.8/19.1 (25.5/27.2)
R.m.s.d. bond/angle (Å/°)	0.007/1.108

Table S2

M-ficolin wild-type 120 µg/ml v 3.2

Chart #	Masterlist Name	RFU
47	<b>Neu5Ac(9Ac)</b> a2-6Galb1-4GlcNAcb-Sp8	28171
211	<b>Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glc-Sp0</b>	23878
208	<b>Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0</b>	22857
142	<b>Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12</b>	22846
389	<b>Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14</b>	21171
46	<b>Neu5Ac(9Ac)</b> a-Sp8	17976
210	<b>Neu5Aca2-3(GalNAcb1-4)Galb1-4Glc-Sp0</b>	17139
60	Fuca1-2Galb1-3GalNAcb1-4( <b>Neu5Aca2-3</b> )Galb1-4Glc-Sp9	14828
127	Galb1-3GalNAcb1-4( <b>Neu5Aca2-3</b> )Galb1-4Glc-Sp0	12961
234	<b>Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0</b>	11706
209	<b>Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8</b>	9497
59	Fuca1-2Galb1-3GalNAcb1-4( <b>Neu5Aca2-3</b> )Galb1-4Glc-Sp0	4940
361	<b>Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21</b>	2444
237	<b>Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0</b>	1818
198	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12</b>	1763
14	<b>Neu5Acb-Sp8</b>	1650
315	<b>Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12</b>	1441
312	<b>Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14</b>	1436
282	<b>Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0</b>	1399
322	<b>Neu5Ac(9Ac)</b> a2-3Galb1-4GlcNAcb-Sp0	1201
218	<b>Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8</b>	1178
214	<b>Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0</b>	924
393	<b>Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19</b>	695
244	<b>Neu5Aca2-6Galb1-4GlcNAcb-Sp8</b>	684
236	<b>Neu5Aca2-3Galb1-4GlcNAcb-Sp8</b>	626
235	<b>Neu5Aca2-3Galb1-4GlcNAcb-Sp0</b>	614
249	<b>Neu5Aca2-6Galb-Sp8</b>	555
247	<b>Neu5Aca2-6Galb1-4Glc-Sp0</b>	511
373	<b>Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14</b>	476
290	Galb1-3( <b>Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14</b>	433
225	<b>Neu5Aca2-3Galb1-3GlcNAcb-Sp8</b>	409
248	<b>Neu5Aca2-6Galb1-4Glc-Sp8</b>	402
238	<b>Neu5Aca2-3Galb1-4Glc-Sp0</b>	333
222	<b>Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glc-Sp0</b>	329
224	<b>Neu5Aca2-3Galb1-3GlcNAcb-Sp0</b>	309
213	<b>Neu5Aca2-3GalNAca-Sp8</b>	299
342	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12</b>	296
340	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12</b>	296
253	<b>Neu5Acb2-6Galb1-4GlcNAcb-Sp8</b>	287
341	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12</b>	279
274	Galb1-3( <b>Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14</b>	277
362	<b>Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp21</b>	262
318	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N(LT)AVL</b>	260
226	<b>Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8</b>	259
243	<b>Neu5Aca2-6Galb1-4GlcNAcb-Sp0</b>	255
230	<b>Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8</b>	251
246	<b>Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0</b>	248
232	<b>Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8</b>	247
371	<b>NeuAca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14</b>	245
219	<b>Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8</b>	238

Table S2 (Cont)

221	<b>Neu5Aca2-3Galb-Sp8</b>	223
212	<b>Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8</b>	217
123	Galb1-3( <b>Neu5Aca2-6</b> )GlcNAcb1-4Galb1-4Glc-Sp10	215
301	GlcNAcb1-2Mana1-3( <b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6</b> )Manb1-4GlcNAcb1-4GlcNAcb-Sp12	209
242	<b>Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8</b>	208
44	<b>Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8</b>	207
252	<b>Neu5Acb2-6GalNAca-Sp8</b>	198
339	Mana1-3( <b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6</b> )Manb1-4GlcNAcb1-4GlcNAc-Sp12	194
314	<b>Neu5Aca2-3Galb1-3GalNAca-Sp14</b>	192
325	<b>Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0</b>	190
316	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12</b>	185
220	<b>Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8</b>	178
215	<b>Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8</b>	177
205	<b>Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glc-Sp0</b>	175
317	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12</b>	172
250	<b>Neu5Aca2-8Neu5Aca-Sp8</b>	169
13	<b>Neu5Aca-Sp11</b>	166
233	<b>Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0</b>	154
231	<b>Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8</b>	153
207	<b>Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8</b>	151
239	<b>Neu5Aca2-3Galb1-4Glc-Sp8</b>	149
201	<b>Neu5Aca2-3Galb1-3GalNAca-Sp8</b>	145
372	<b>NeuAca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14</b>	142
12	<b>Neu5Aca-Sp8</b>	139
313	<b>Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14</b>	136
323	<b>Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0</b>	135
320	Galb1-3( <b>Neu5Aca2-6</b> )GalNAca-Sp14	132
122	Galb1-3( <b>Neu5Acb2-6</b> )GalNAca-Sp8	119
229	<b>Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0</b>	113
228	<b>Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0</b>	106
217	<b>Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0</b>	105
331	<b>(Neu5Aca2-3-Galb1-3)((Neu5Aca2-3-Galb1-4(Fuca1-3))GlcNAcb1-6)GalNAc-Sp14</b>	103
245	<b>Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0</b>	100
241	<b>Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0</b>	96
206	<b>Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8</b>	96
251	<b>Neu5Aca2-8Neu5Aca2-3Galb1-4Glc-Sp0</b>	91
53	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13</b>	89
54	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp8</b>	89
396	<b>Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14</b>	87
281	<b>Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0</b>	86
203	<b>Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glc-Sp0</b>	84
240	<b>Neu5Aca2-6GalNAca-Sp8</b>	81
1	<b>Neu5Aca2-8Neu5Acb-Sp17</b>	75
121	Galb1-3( <b>Neu5Aca2-6</b> )GalNAca-Sp8	74
216	<b>Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8</b>	71
227	<b>Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8</b>	70
52	<b>Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12</b>	70
326	<b>Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0</b>	67
204	<b>Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glc-Sp0</b>	55
324	<b>Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0</b>	46
202	<b>Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glc-Sp0</b>	41
223	<b>Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0</b>	31
2	<b>Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8</b>	20