

# Glyco-Forum section

## Supplier-dependent antiglycan monoclonal antibody specificities: Comment on “High-throughput carbohydrate microarray profiling of 27 antibodies demonstrates widespread specificity problems”

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We recently reported carbohydrate microarray profile results for a set of commercially available antiglycan monoclonal antibodies (Manimala et al. 2007), including clone A70-C/C8 (Kuemmel et al. 2007), which we acquired from Cell Sciences (Canton, MA), and antibodies B386 and B389, which we acquired from Biomedica (Foster City, CA). It was our understanding that B386 was equivalent to A68-B/A11 (Karsten et al. 1995) and B389 was equivalent to A70-A/A9 (Christensen et al. 2007). Subsequent to publication, we obtained A70-C/C8, A68-B/A11, and A70-A/A9 from the original source, Glycotope GmbH, Berlin-Buch (Dr. Uwe Karsten). In a side-by-side comparison, two of the antibodies supplied by Glycotope produced significantly different results as compared to the antibodies from Cell Sciences and Biomedica. In our assay, antibody A70-C/C8 from Glycotope bound selectively to Le<sup>Y</sup> while A70-C/C8 from Cell Sciences cross-reacted with blood group B as we had reported. Antibody A68-B/A11 from Glycotope displayed reactivity with TF $\alpha$ , GA1 (TF $\beta$ ), blood group A, blood group B, blood group H1, GM1, and tri-LacNAc while B386 from Biomedica bound blood group B had minor reactivity with blood group A trisaccharide and did not bind TF $\alpha$ , GA1 (TF $\beta$ ), blood group H1, GM1, or tri-LacNAc. Antibody A70-A/A9 from Glycotope and B389 from Biomedica both bound selectively to Le<sup>Y</sup> and did not show appreciable differences. Based on these results, binding data, tissue staining, and Western blots obtained with a particular antibody should be interpreted in relation to the supplier. Table I lists the original sources and catalog numbers for the antibodies profiled in our previous paper (Manimala et al. 2007).

**Table I.** Sources and catalog numbers for the antibodies

Clone	Listed antigen	Source company	Catalog number
81FR2.2	BG-A	Dako Cytomation	A0581
B480	BG-A	Biomedica	V3251
CLCP-19B	BG-B	EMD	202769
B460	BG-B	Biomedica	V7071
B389	BG-H2, Le <sup>Y</sup> , Le <sup>b</sup>	Biomedica	V7025
92FR-A2	BG-H2	Biomedica	V1087
B376	BG-H2	Biomedica	V7023
A63-D/B12	Le <sup>Y</sup> , BG-H2	Glycotope	MAB-P205
B393	BG-H2	Biomedica	V7022
A46-B/B10	Le <sup>Y</sup> , BG-H2	Glycotope	MAB-P203
7LE	Le <sup>a</sup>	Lab Vision	MS-494 – P0
PR.5C5	Le <sup>a</sup>	Chemicon	CBL205
T174	Le <sup>a</sup>	EMD	434627
121SLE	SLe <sup>a</sup>	Lab Vision	MS-379 – P0
CA199.02	SLe <sup>a</sup>	Lab Vision	MS-1166 – P0
2-25LE	Le <sup>b</sup>	Lab Vision	MS-1024 – P0
T218	Le <sup>b</sup>	EMD	434629
K21	Le <sup>c</sup>	Genetex	GTX23352
15C02	Le <sup>x</sup>	Lab Vision	MS-739 – S0
28	Le <sup>x</sup>	Chemicon	CBL144
ZC-18C	Le <sup>x</sup>	Chemicon	MAB1205
FR4A5	Le <sup>x</sup>	Lab Vision	MS-430 – P1
BR55	Le <sup>y</sup>	Glycotect	11-006
F3	Le <sup>y</sup>	EMD	434636
A70-C/C8	Le <sup>y</sup>	Cell Sciences	MON2047
B1.1	Tn	Biomedica	V1053
B386	TF	Biomedica	V7028
1A4	Gb3	Glycotect	11-008
5B5	Gb3	BD Biosciences	551352

## References

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