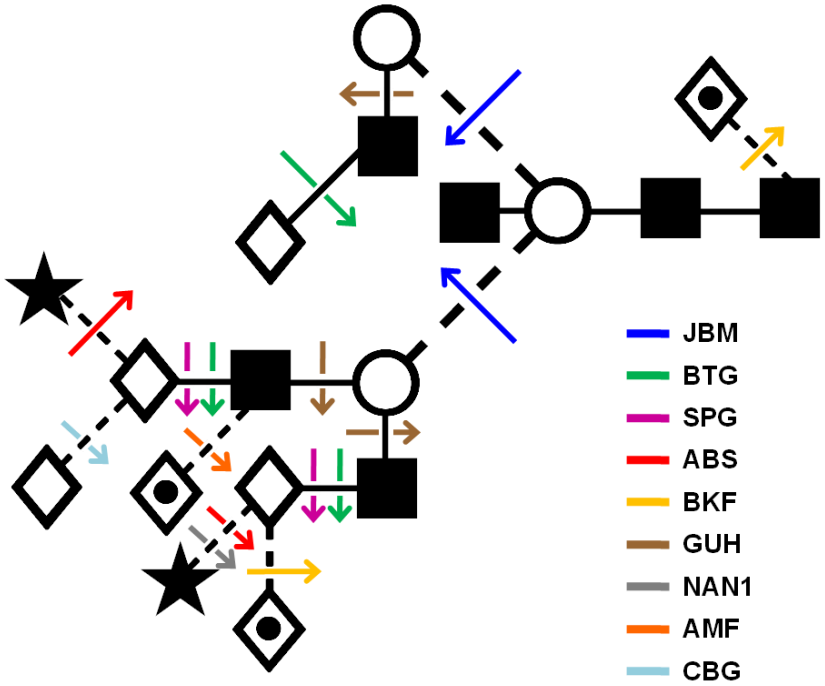
Enzymatic Specificities

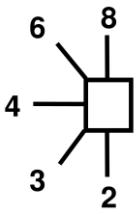


Enzyme	Full Name and Activity
JBM	**Jack Bean Mannosidase** Releases α(1-2) and α(1-6) more efficiently than α(1-3) linked mannose residues
BTG	**Bovine testes β-Galactosidase** Hydrolyses non-reducing terminal β(1-3) and β(1-4) linked galactose
SPG	***Streptococcus pneumonia* β-Galactosidase** Hydrolyses non-reducing terminal β(1-4) linked galactose residues
ABS	***Athrobacter ureafaciens* Sialidase** Releases α(2-6) and α(2-8) lined non-reducing terminal sialic acids (NeuNAc and NeuNGc)
BKF	**Bovine Kidney α-Fucosidase** Releases α(1-2) and α(1-6) linked non-reducing terminal fucose residues more efficiently than α(1-3) and α(1-4) linked fucose. Used for release of core fucose residues.
GUH	***Streptococcus pneumonia* Hexosaminidase** Recombinantly expressed in *E. coli*. Releases β-linked GlcNAc but not bisecting GlcNAc β(1-4) Man
NAN1	**Recombinant Sialidase** Releases α(2-3) linked non-reducing terminal sialic acids (NeuNac and NeuNGc)
AMF	**Almond Meal α-Fucosidase** Releases α(1-3) and α(1-4) linked non-reducing terminal fucose residues Does not release core α(1-3) and α(1-6) linked fucose
CBG	**Coffee Bean α-Galactosidase** Hydrolyses α(1-3) and α(1-4) linked terminal galactose residues

All N-glycans have two core GlcNAcs; F at the start of the abbreviation indicates a core α(1-6) fucose linked to the inner GlcNAc; Mx, number (x) of mannose on core GlcNAcs; Ax, number of antenna (GlcNAc) on trimannosyl core; A2, biantennary with both GlcNAcs as β(1-2) linked; A3, triantennary with a GlcNAc linked β1-2 to both mannose and a third GlcNAc linked β(1-4) to the α(1-3) linked mannose; A3', triantennary with a GlcNAc linked β(1-2) to both mannose and the third GlcNAc linked β(1-6) to the α(1-6) linked mannose; A4, GlcNAcs linked as A3 with additional GlcNAc β(1-6) linked to α(1-6) mannose; B, bisecting GlcNAc linked β(1-4) to β(1-3) mannose; Gx, number (x) of β1-4 linked galactose on the antenna; Fx, number (x) of linked fucose on antenna, (4) or (3) after the F indicates that the Fuc is α(1-4) or α(1-3) linked to the GlcNAc; Sx, number (x) of sialic acids linked to galactose; the number 3 or 6 in parentheses after S indicates whether the sialic acid is in an α(2-3) or α(2-6) linkage.

Monosaccharide Symbol		
■	N-acetylglucosamine	GlcNAc
□	Glucose	Glc
◇	Galactose	Gal
◆	N-acetylgalactosamine	GalNAc
◈	Fucose	Fuc
○	Mannose	Man
★	N-acetylneuraminic acid	NeuNAc
△	Xylose	Xyl

Linkage Position



Linkage Type

- α linkage
- β linkage
- unknown α linkage
- unknown β linkage