





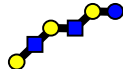
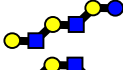




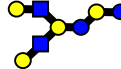


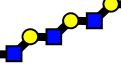


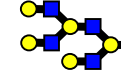


Table 1 The 20 core structures of human milk oligosaccharides

Name	Structures	CFG format
I. Lactose	Gal(β1-4)Glc	
II. Lacto- <i>N</i> -tetraose	Gal(β1-3)GlcNAc(β1-3)Gal(β1-4)Glc	
III. Lacto- <i>N</i> -neotetraose	Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)Glc	
IV. Lacto- <i>N</i> -novopentaose-I	Gal(β1-4)GlcNAc(β1-6) Gal(β1-3) Gal(β1-4)Glc	
V. Lacto- <i>N</i> -hexaose	Gal(β1-4)GlcNAc(β1-6) Gal(β1-3)GlcNAc(β1-3) Gal(β1-4)Glc	
VI. Lacto- <i>N</i> -neohexaose	Gal(β1-4)GlcNAc(β1-6) Gal(β1-4)GlcNAc(β1-3) Gal(β1-4)Glc	
VII. <i>para</i> -Lacto- <i>N</i> -hexaose	Gal(β1-3)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)Glc	
VIII. <i>para</i> -Lacto- <i>N</i> -neohexaose	Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)Glc	
IX. Lacto- <i>N</i> -octaose	Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-6) Gal(β1-3)GlcNAc(β1-3) Gal(β1-4)Glc	
X. Lacto- <i>N</i> -neooctaose	Gal(β1-3)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-6) Gal(β1-4)GlcNAc(β1-3) Gal(β1-4)Glc	
XI. <i>iso</i> -Lacto- <i>N</i> -octaose	Gal(β1-3)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-6) Gal(β1-3)GlcNAc(β1-3) Gal(β1-4)Glc	

continued

Table 1 (continued)

Name	Structures	CFG format
XII. <i>iso</i> -Lacto- <i>N</i> -neooctaose	$\begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3)\text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \text{Gal}(\beta 1-4)\text{Glc}$	
XIII. <i>novo</i> -Lacto- <i>N</i> -octaose	$\begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-3)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3)\text{Gal}(\beta 1-4)\text{Glc}$	
XIV. <i>novo</i> -Lacto- <i>N</i> -neooctaose	$\begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3)\text{Gal}(\beta 1-4)\text{Glc}$	
XV. <i>para</i> -Lacto- <i>N</i> -octaose	Gal(β1-3)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)Glc	
XVI. <i>para</i> -Lacto- <i>N</i> -neooctaose	Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)GlcNAc(β1-3)Gal(β1-4)Glc	
XVII. Lacto- <i>N</i> -decaose	$\begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-3)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-3)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \text{Gal}(\beta 1-4)\text{Glc}$	
XVIII. Lacto- <i>N</i> -neodecaose	$\begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-3)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \text{Gal}(\beta 1-4)\text{Glc}$	
XIX. <i>iso</i> -Lacto- <i>N</i> -decaose	$\begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \begin{array}{l} \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \text{Gal}(\beta 1-4)\text{Glc}$	
XX. <i>novo</i> -Lacto- <i>N</i> -decaose	$\begin{array}{l} \text{Gal}(\beta 1-3)\text{GlcNAc}(\beta 1-3)\text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-6) \\ \text{Gal}(\beta 1-3)\text{GlcNAc}(\beta 1-3)\text{Gal}(\beta 1-4)\text{GlcNAc}(\beta 1-3) \end{array} \backslash \text{Gal}(\beta 1-4)\text{Glc}$	