































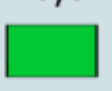


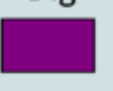

















Abstract

Description

This chapter offers a general background for students embarking in glycoscience to grasp an essential component of the field, i.e. the alphabet of the building blocks that constitute the many naturally occurring glycans and complex carbohydrates. There is a need to conform to the recommendations of nomenclatures of carbohydrates whilst the constraints required by the developing field of glycobiology in terms of visualization and encoding. The present chapter offers a unified presentation of the nomenclature and symbols that form part of the “language” used to communicate more effectively. It covers about 150 monosaccharides which have been identified as the building blocks of a vast majority of bioactive glycans. A standardization in drawing glycan structures, essential for effective communication, has been adopted (Varki et al., 2015). It is referred to as Symbol Nomenclature For Glycans (SNFG)

<https://www.ncbi.nlm.nih.gov/glycans/snfg.html>.

The depiction of the 75 monosaccharides is presented below. Use of these symbols to represent monosaccharides is strongly recommended for all manuscripts submitted to major journals and other publications.

Hexose	Glc 	Man 	Gal 	Gul 	Alt 	All 
HexNAc	GlcNAc 	ManNAc 	GalNAc 	GulNAc 	AltNAc 	AllNAc 
Hexoasamine	GlcN 	ManN 	GalN 	GulN 	AltN 	AllN 
Hexuronate	GlcA 	ManA 	GalA 	GulA 	AltA 	AllA 
DeoxyHexose	Qui 	Rha 			6dAlt 	
DeoxyHexNAc	QuiNAc 	RhaNAc 				
DiDeoxyHexose	Oli 	Tyv 		Abe 	Par 	Dig 
Pentose		Ara 	Lyx 	Xyl 	Rib 	
Nonulosonate		Kdn 				Neu5Ac 
Assigned (1)	Bac 	LDManHep 	Kdo 	Dha 	DDManHep 	MurNAc 
Assigned (2)	Api 	Fru 	Tag 	Sor 	Psi 	

[Click here for printable version-

>http://www.glycopedia.eu/IMG/pdf/symbolic_representation_of_monosaccharides_2018.pdf]

[[1](#)] Note : The first version of this article was published online on Glycopedia on September 2013