

12.5: Oligosaccharides as cell markers.

(66) When people with O type blood receive type A, B, or AB, their body rejects the blood because the 4th monosaccharide is unfamiliar. An immune response occurs, which can lead to life threatening blood clotting. Type O blood has the trisaccharide component of all 4 blood types, so it is recognized as a part of the recipient's blood by all recipients.

(67) People with AB blood type ~~are~~ are called universal ~~recipients~~ recipients because they can receive any type of blood: A, AB, B, or O. Type A and B blood components are found in type AB blood, so it is recognized as part of type AB recipient's blood. Type O blood has the trisaccharide component of type AB blood, so it is also recognized by the recipient.

(68) The girl's body did not recognize the 4th monosaccharide, N-acetyl-D-galactosamine, present in A type blood. An immune response occurred, which led to life-threatening blood clotting.