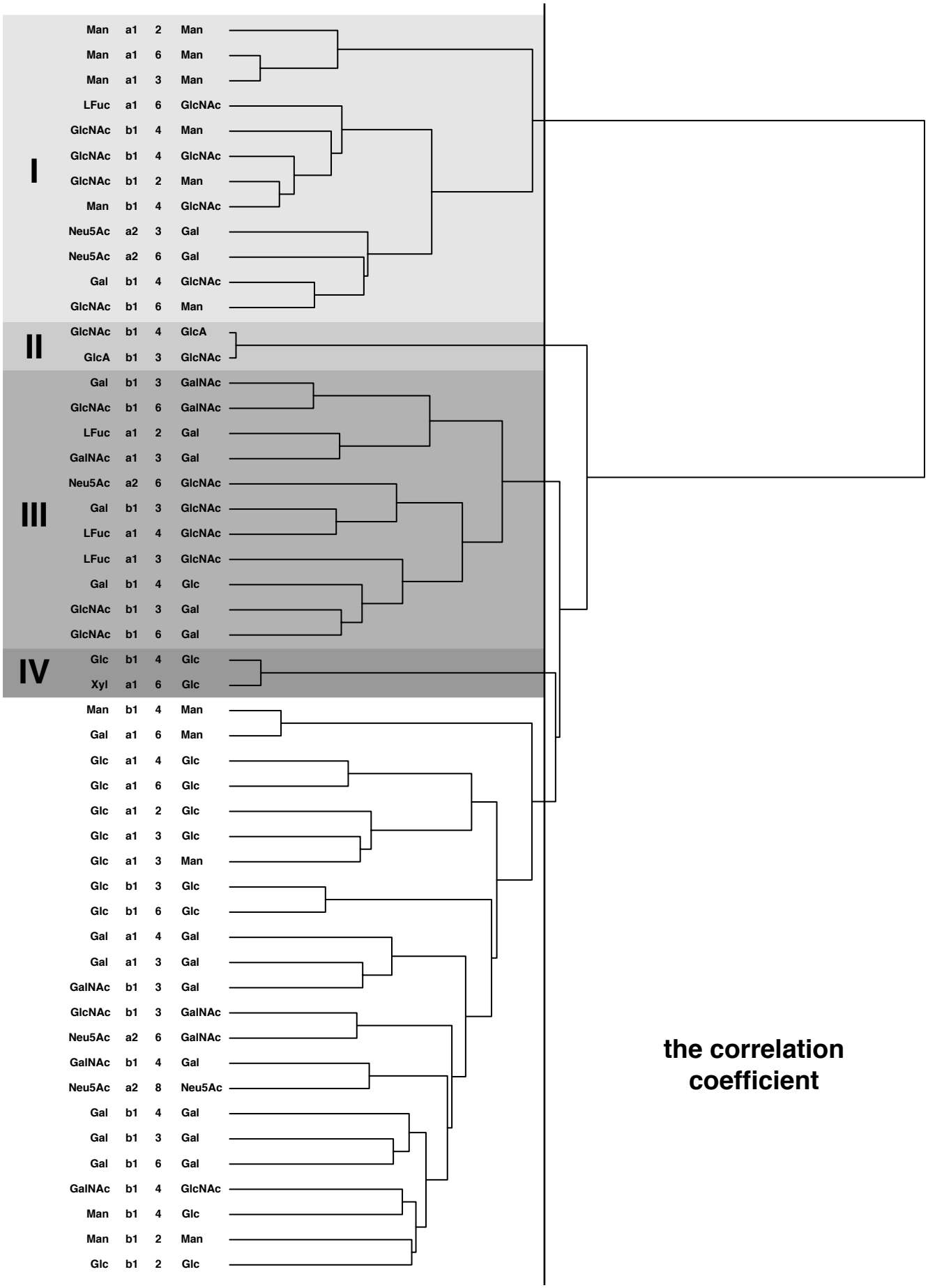

Figure S3. The cluster dendrogram of the co-occurrence of the reaction patterns in the glycan database. The co-occurrence score of the reaction patterns appearing higher in the database (top 50 of 302 reaction patterns) was used. This dendrogram was drawn using the Ward method using negative value of the correlation coefficient as distance. The clusters were divided into five groups. Cluster I consists of *N*-glycan core reaction patterns and thier terminal/internal reaction patterns. Cluster III consists of *O*-glycan and glycolipid core reaction patterns. Clusters II and IV contain the components of proteoglycan and xyloglucan, respectively.