



This drawing shows a model of IgM B cell receptor which anchor onto B cells to recognize the antigen. It consist of a total of 14 glycosylation sites and included tons of diversity within their heavy chains annotated as " μ " and light chains noted as "K". The disulfide bonds are present between CM2 $_A$ & CM2 $_B$ as well as between ECD α & ECD β which allows the two molecules to adhere to each other to function properly. To add its a heterodimer as it contains two different protein subunits Ig-alpha and Ig-beta and these two contain ECD-alpha and ECD-beta. In contrast to IgM pentamer, it's a much larger structure with a star like shape with several immunoglobulin and consist of 10 antigen binding sites. It has a J-chain in the center unlike the IgM B cell receptor. Pentamer IgM large structure allows for it to identify many pathogens; however, it is nonspecific in its classification whereas IgM B cells receptors are more specific to the individual B cell.