

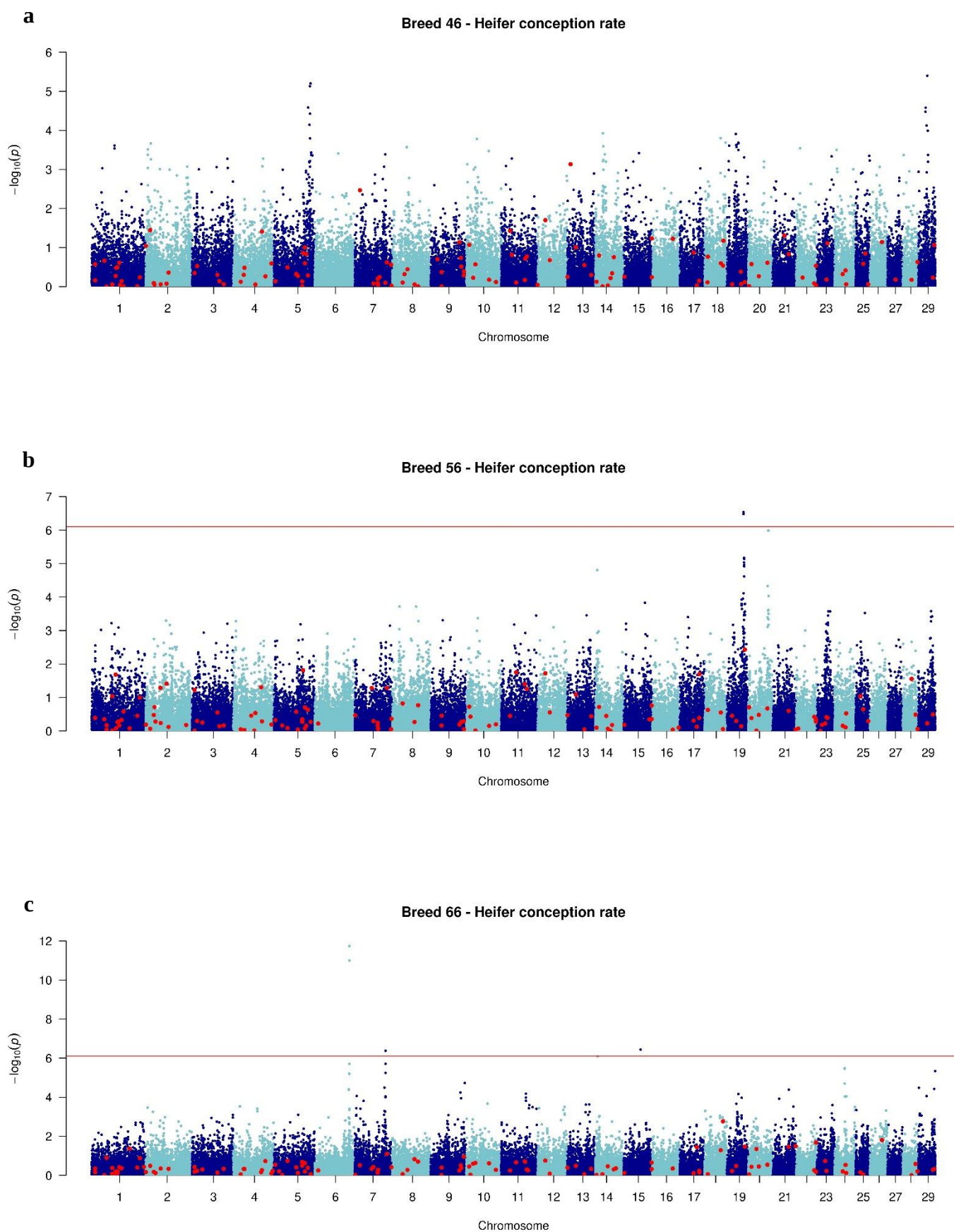


Figure S29 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with heifer conception rate in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

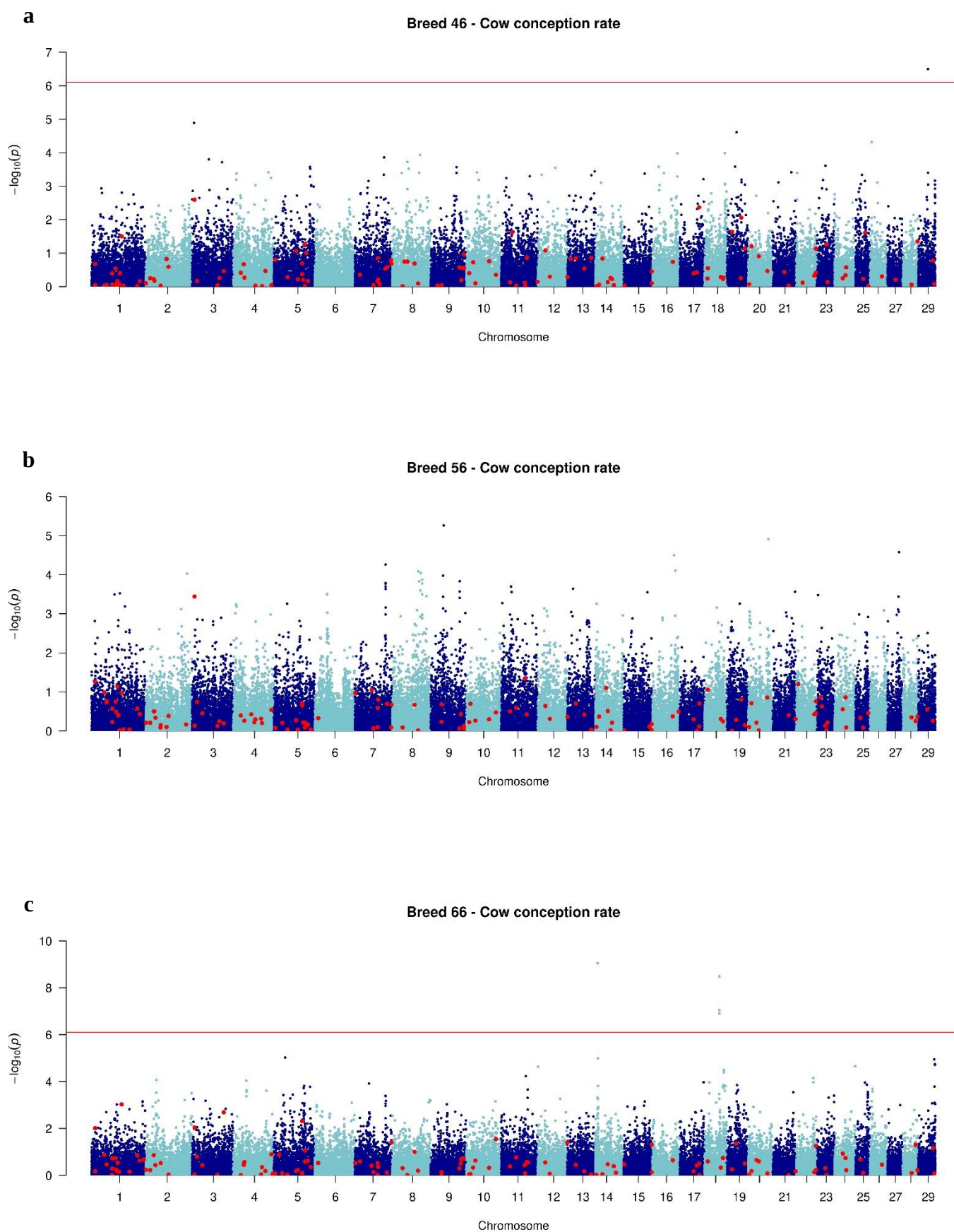


Figure S30 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with cow conception rate in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

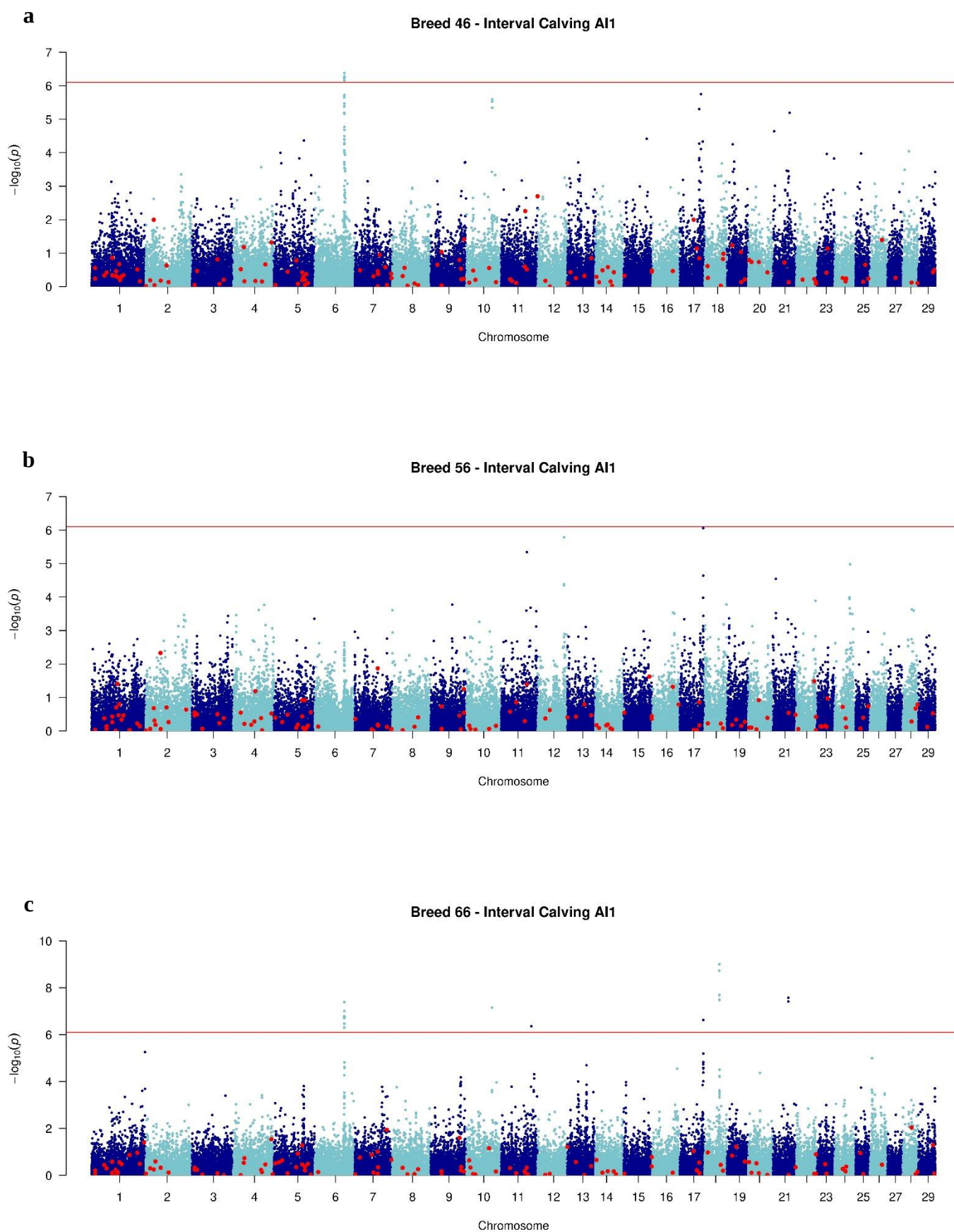


Figure S31 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with interval calving-AI1 in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

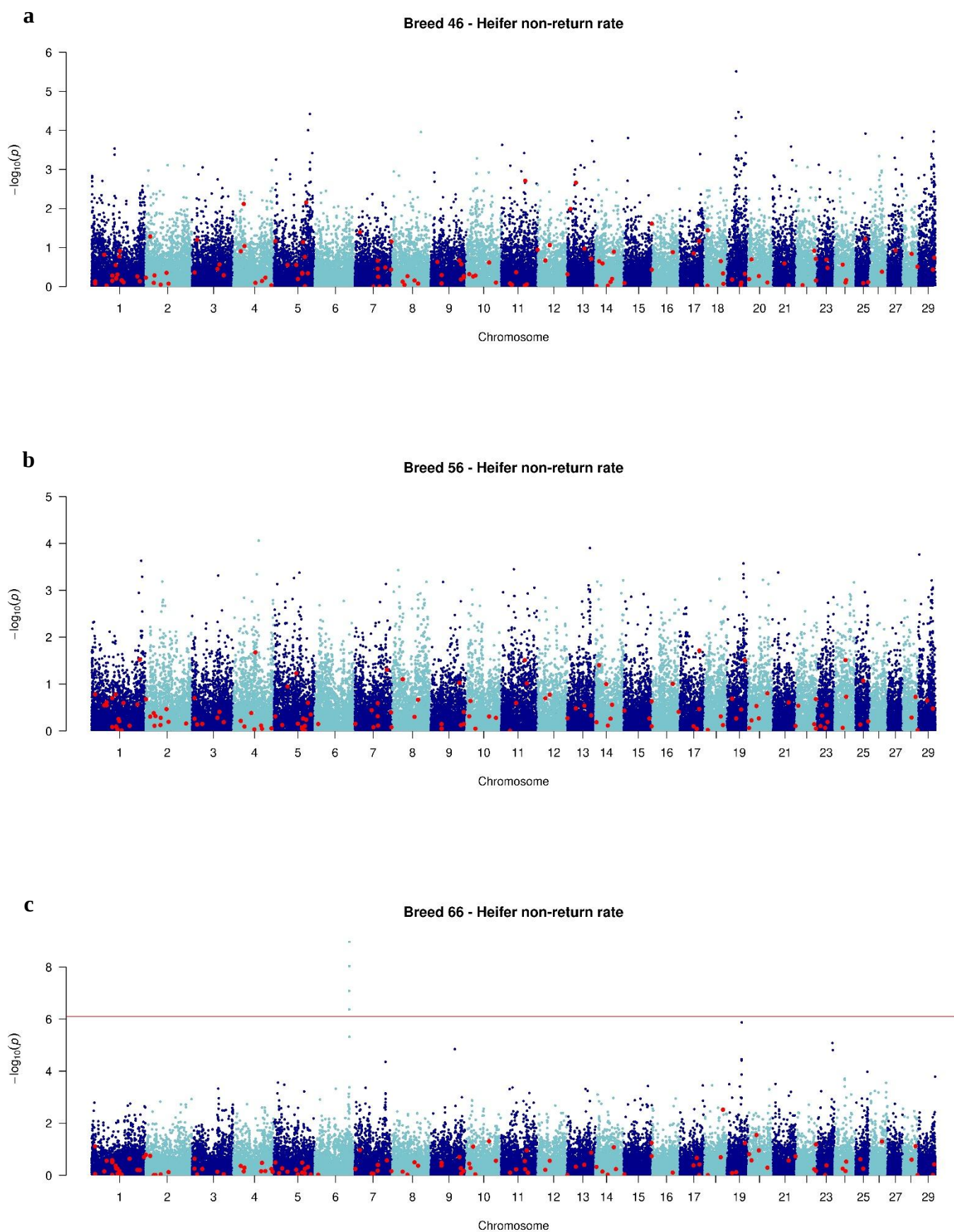


Figure S32 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with heifer non-return rate in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

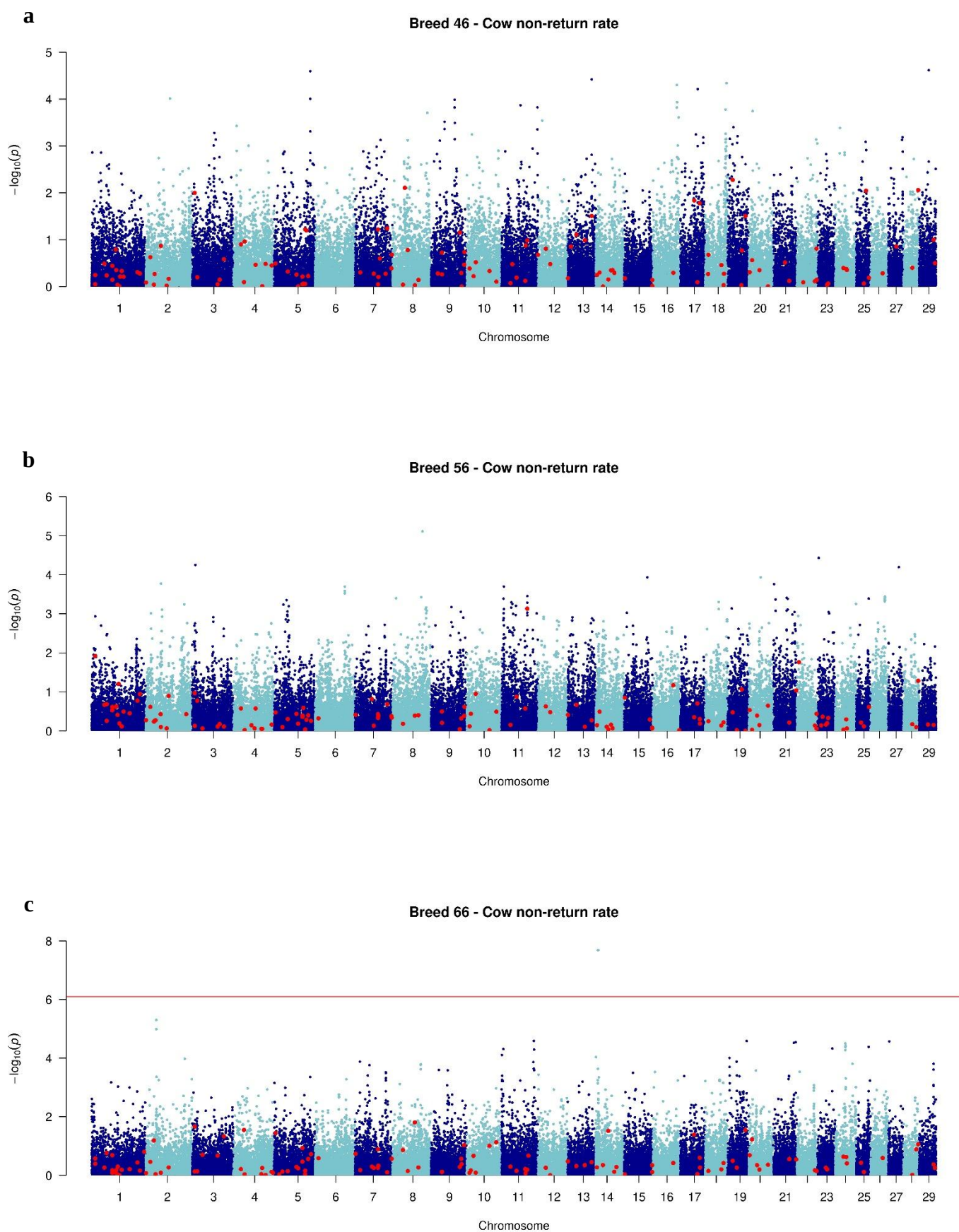


Figure S33 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with cow non-return rate in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

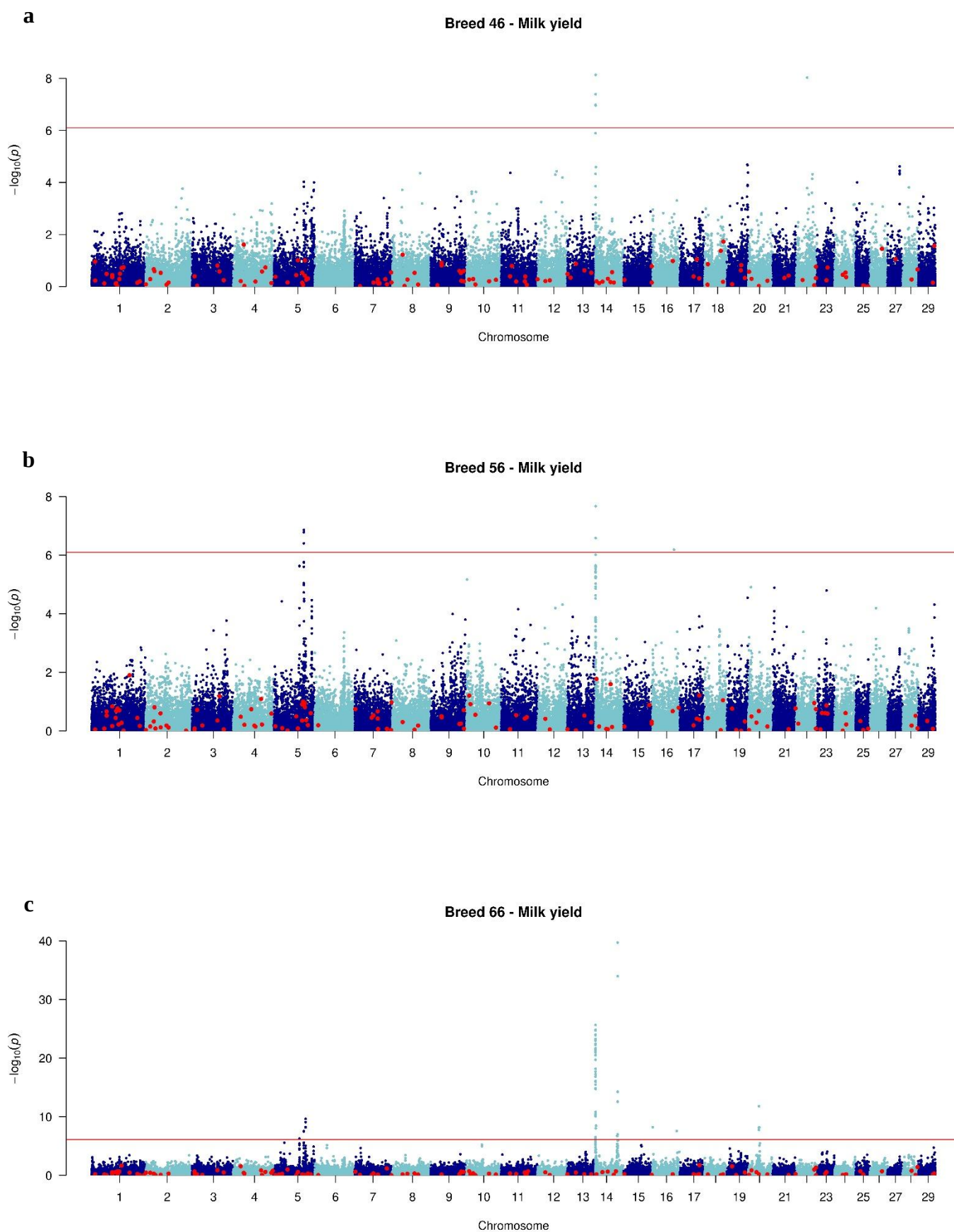


Figure S34 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with milk yield in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

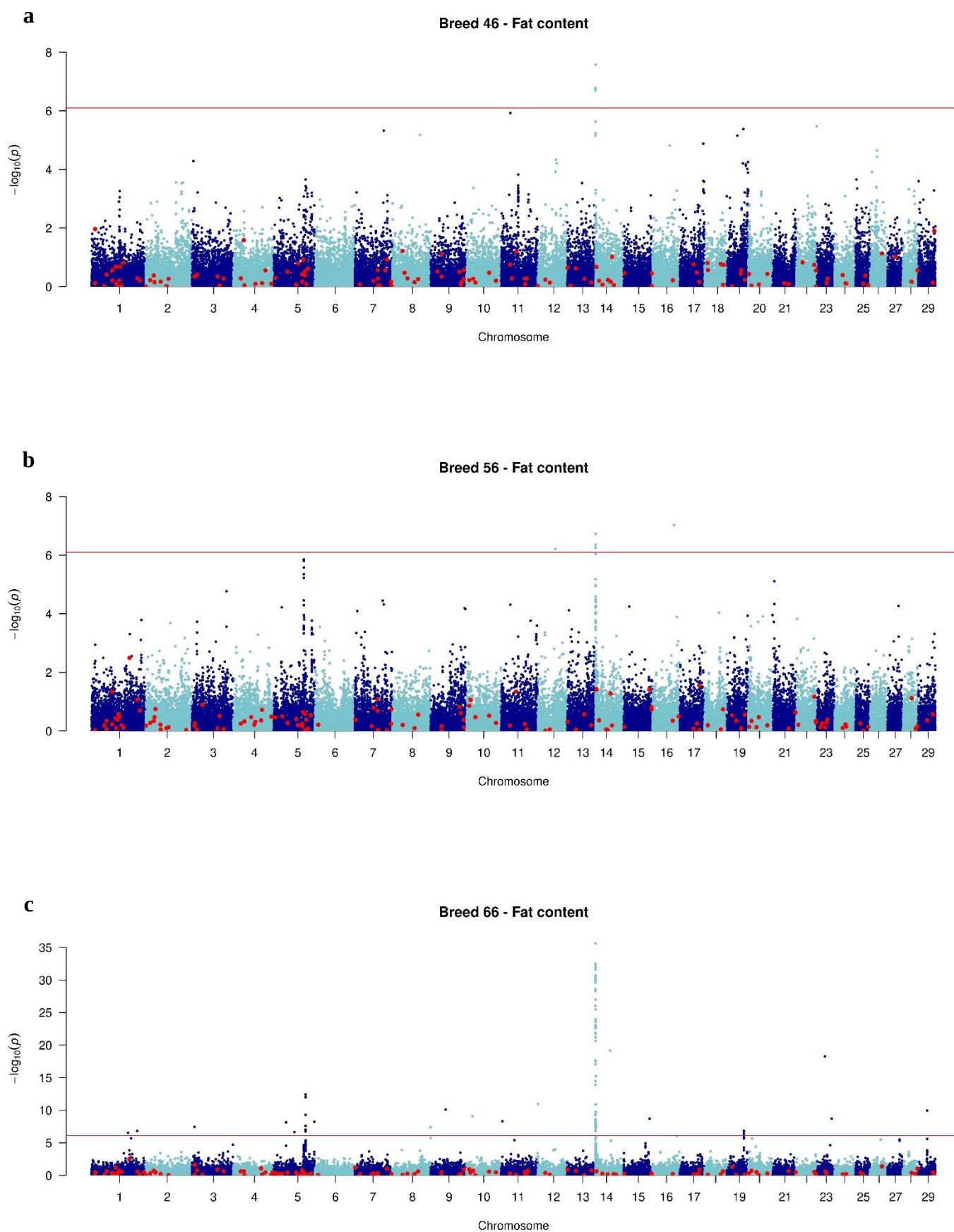


Figure S35 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with fat content in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

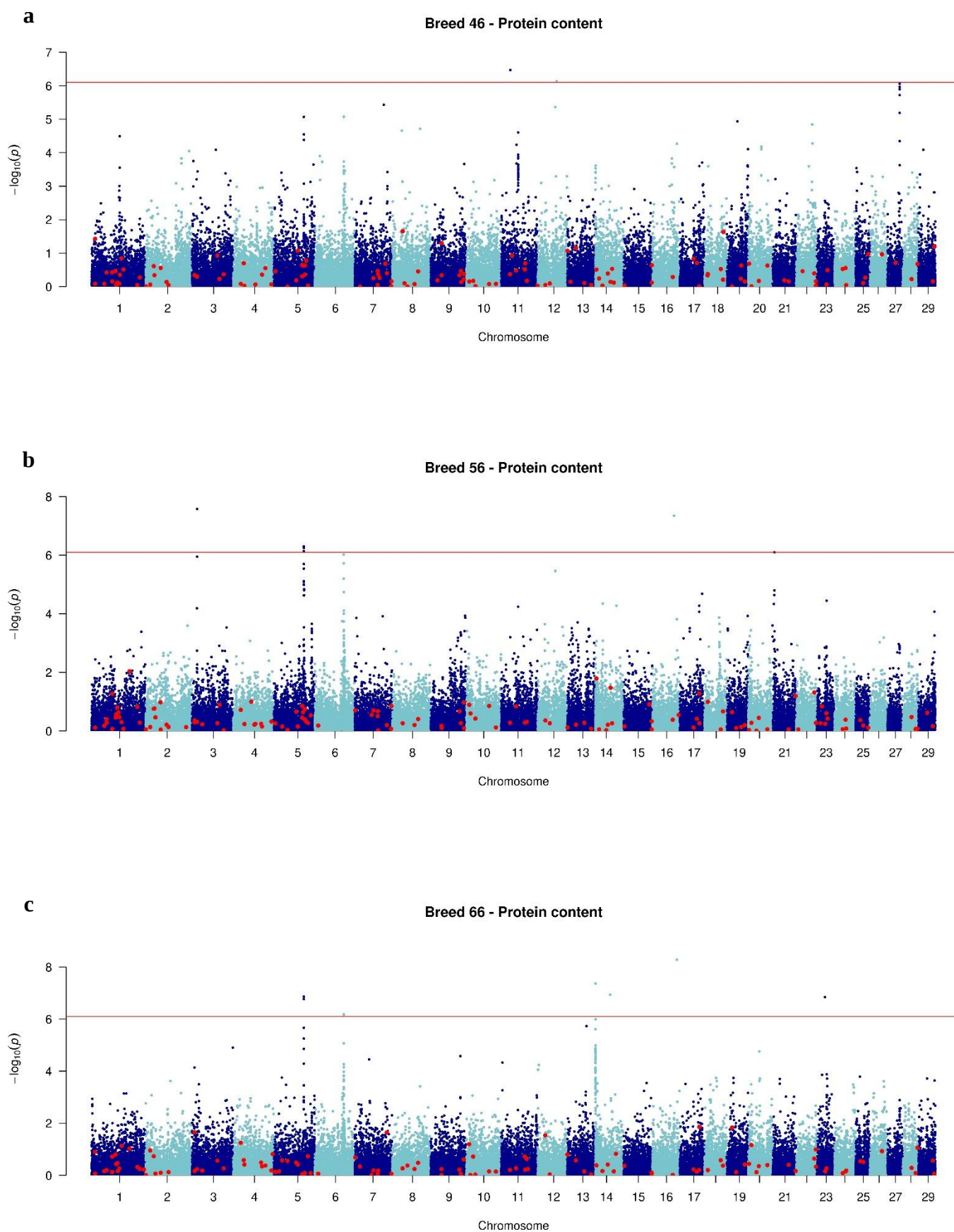


Figure S36 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with protein content in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

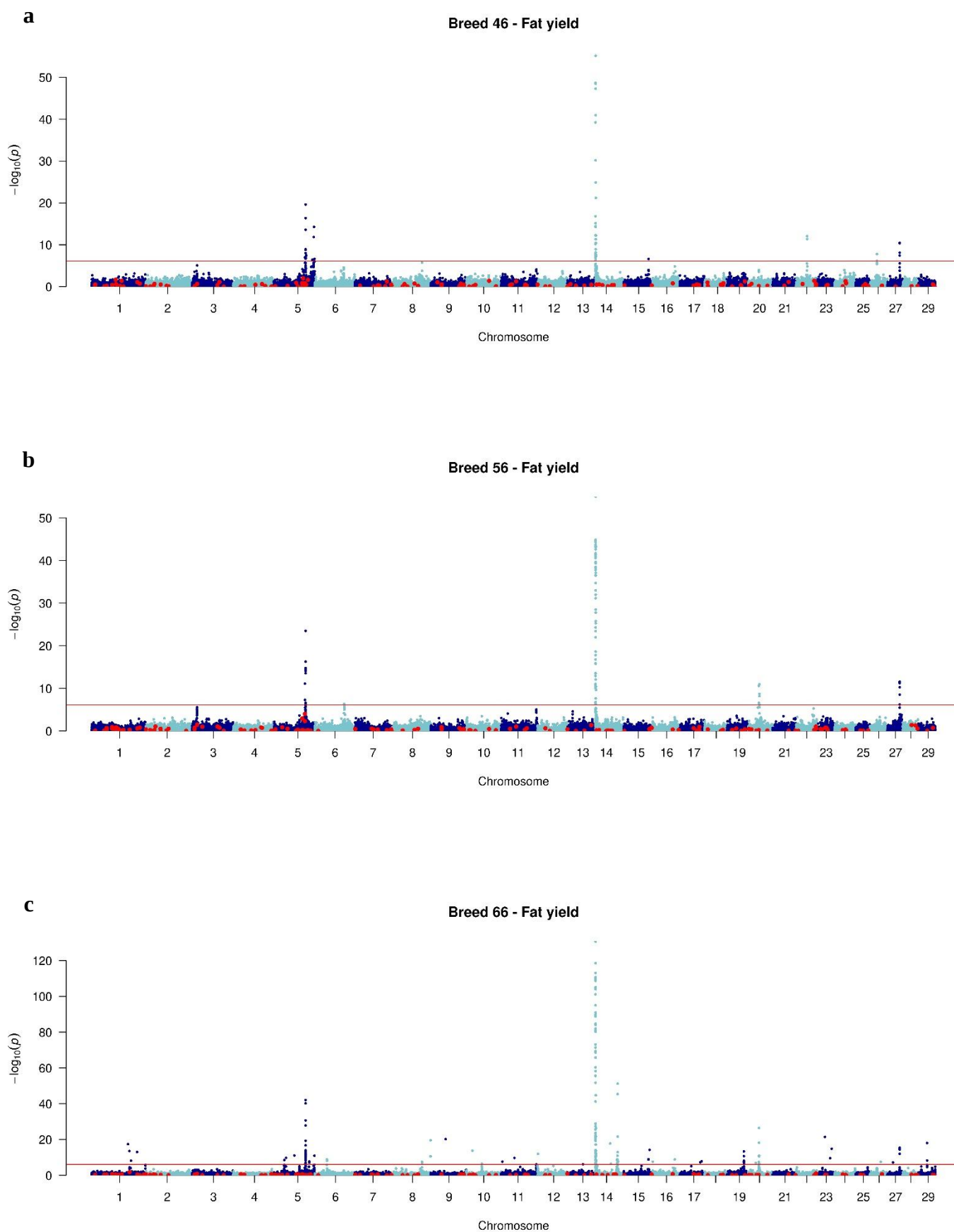


Figure S37 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with fat yield in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

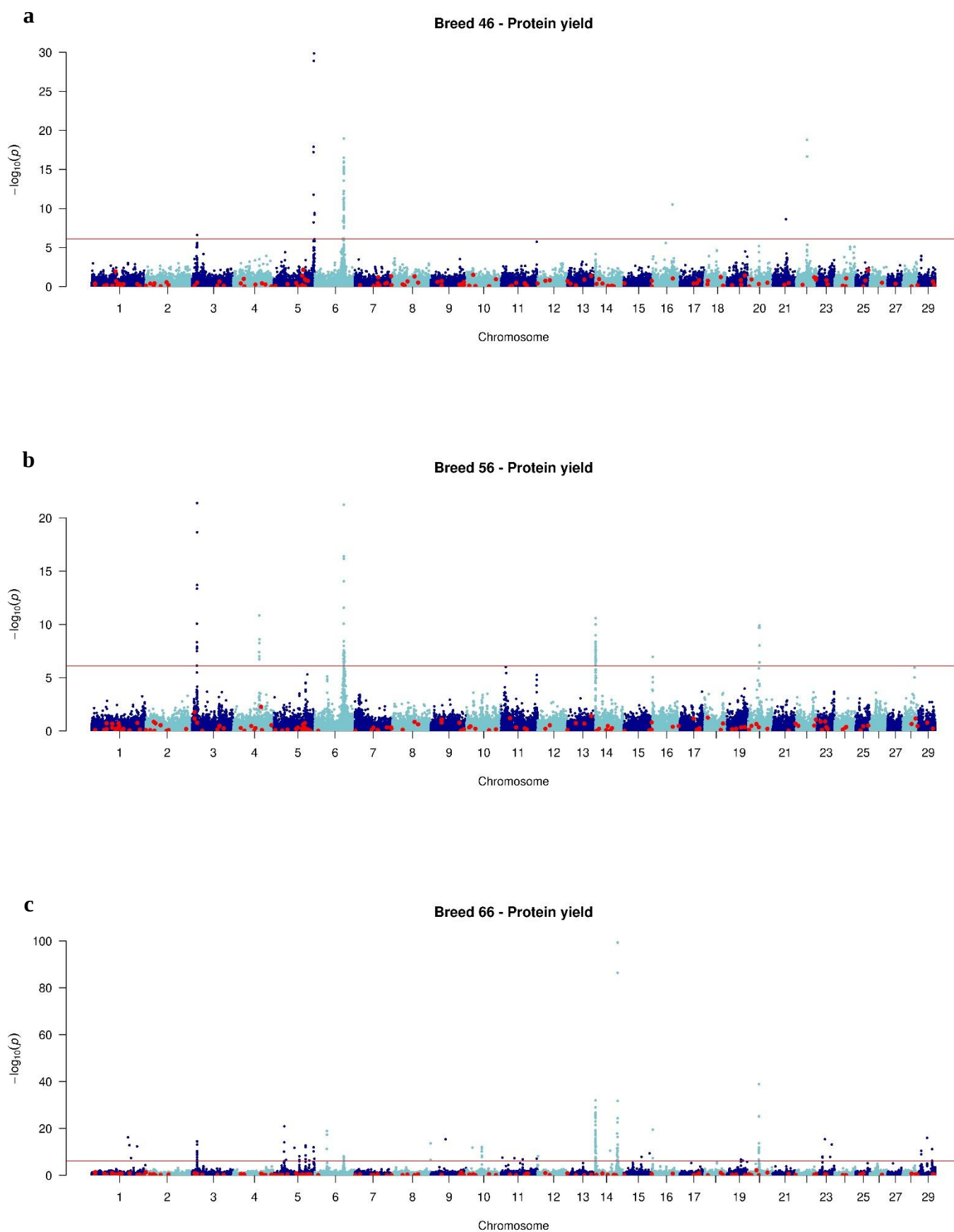


Figure S38 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with protein yield in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

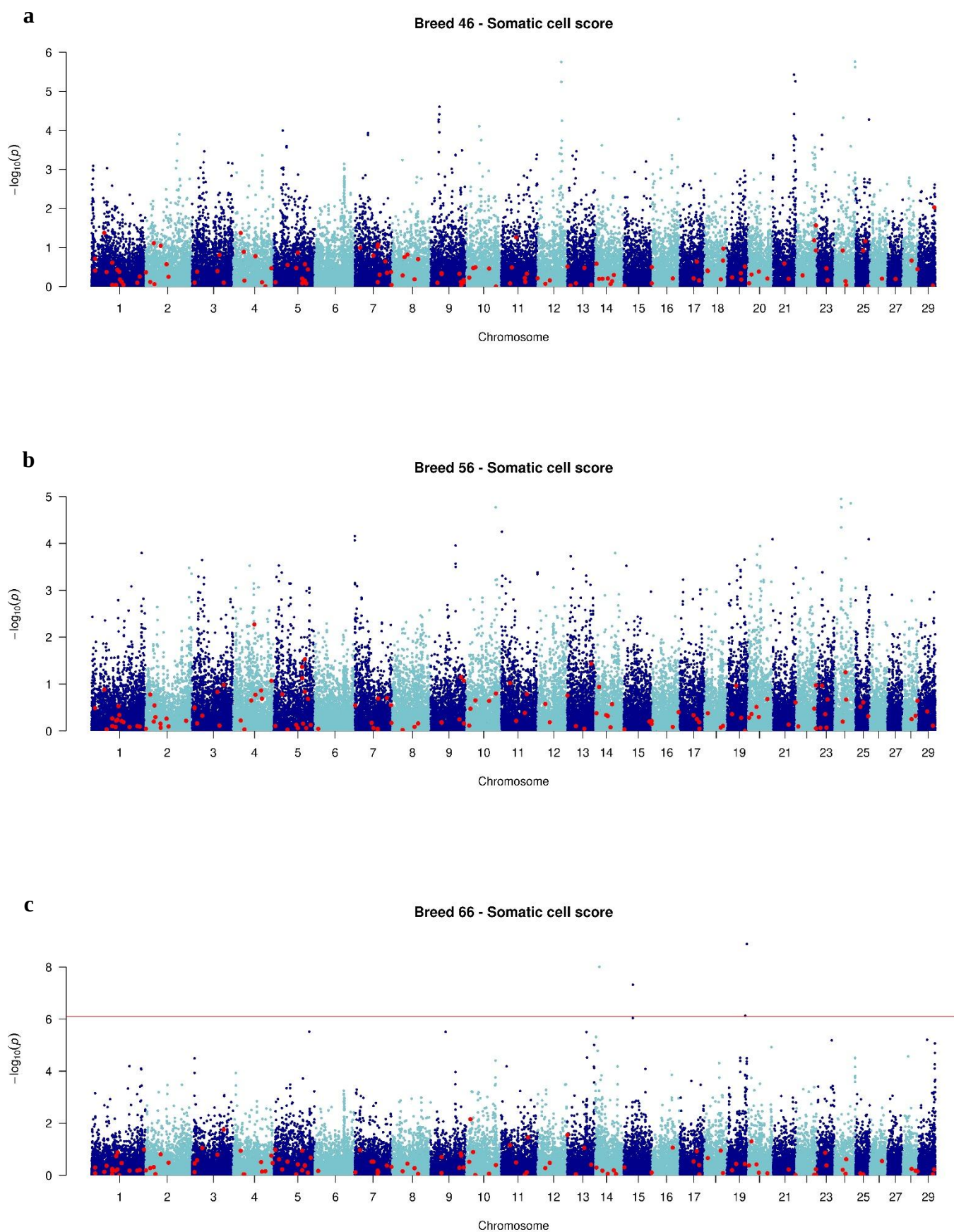


Figure S39 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with somatic cell score in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

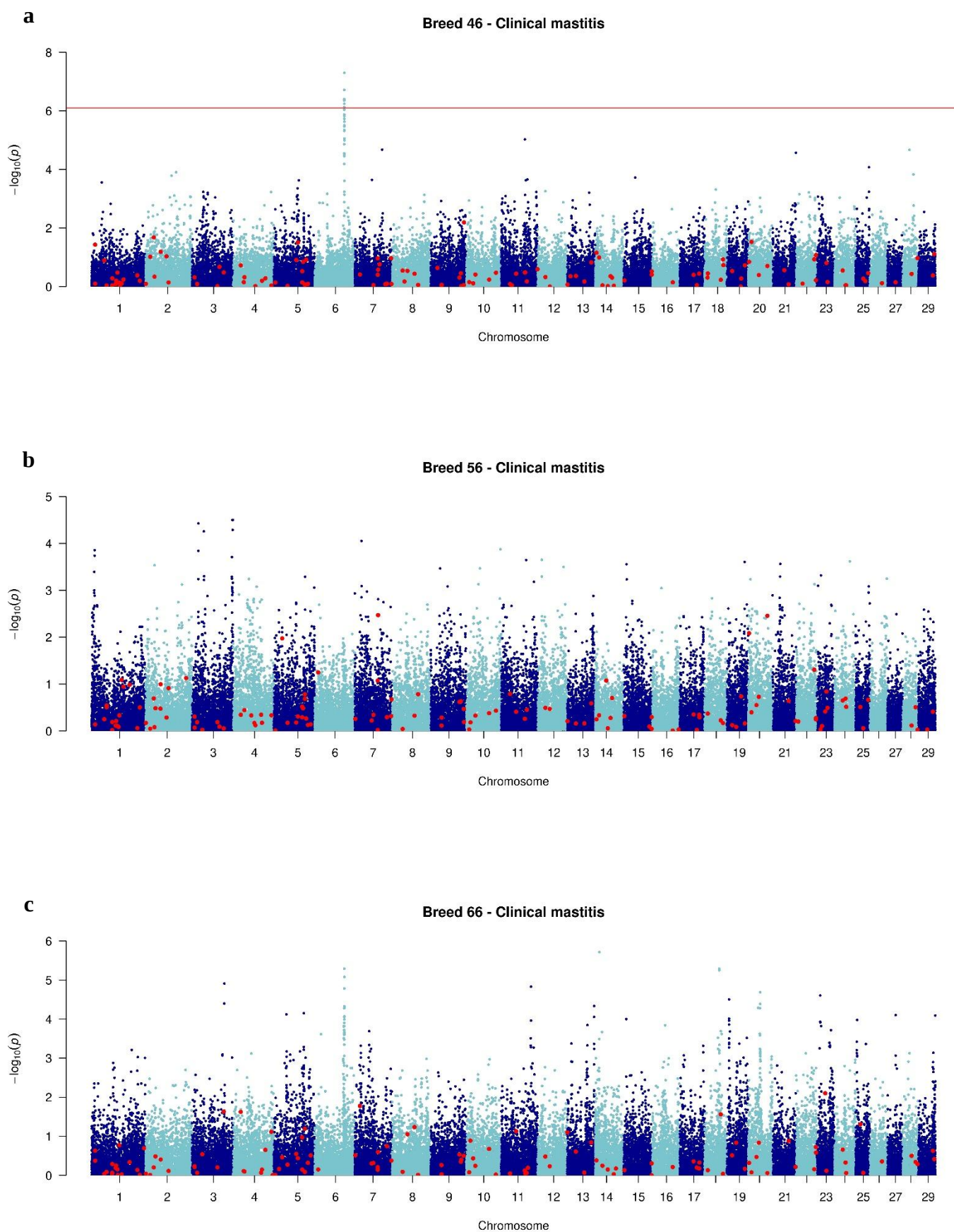


Figure S40 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with clinical mastitis in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls

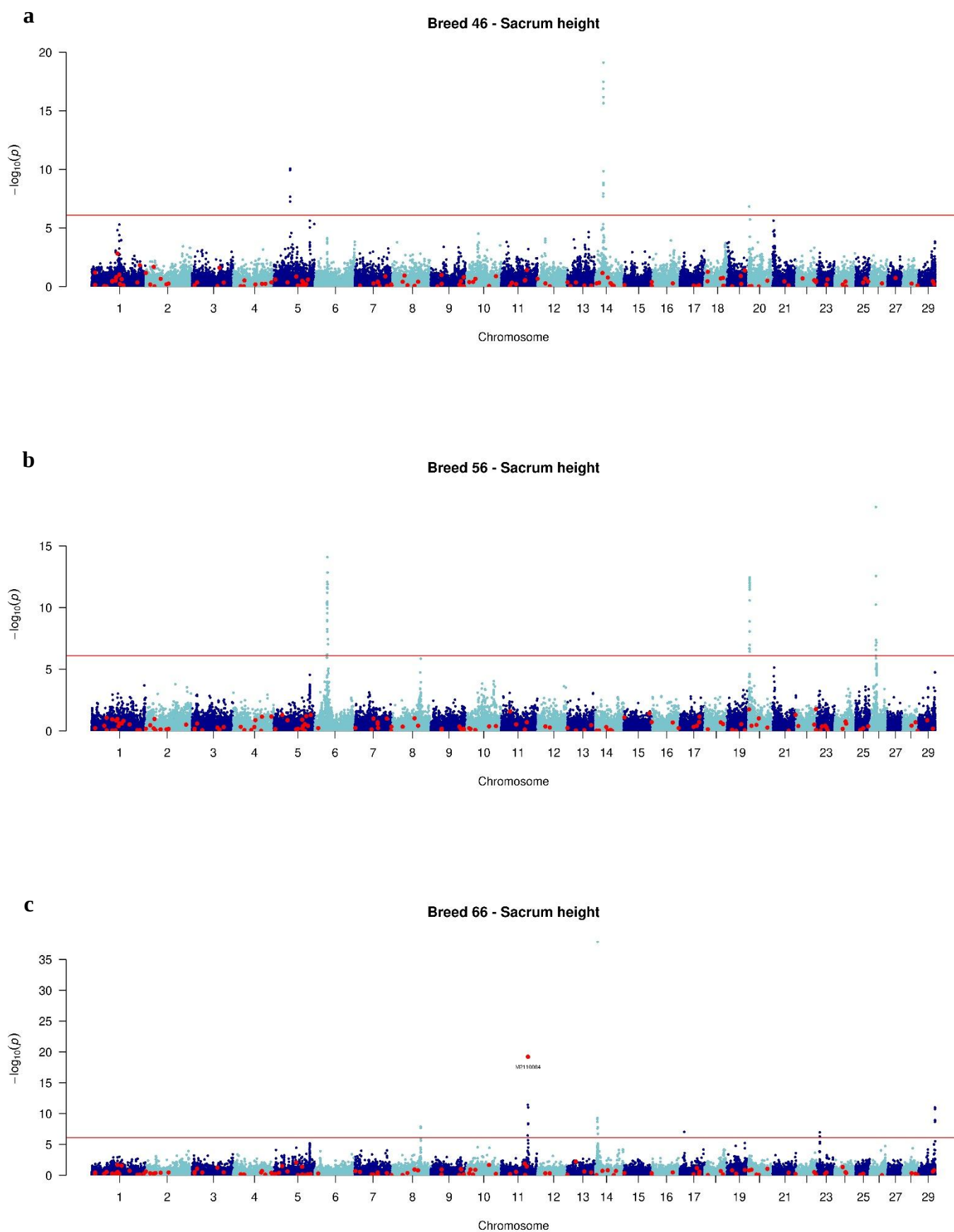


Figure S41 Manhattan plot of GWAS analysis: $-\log_{10}(P)$ values plotted against the positions of *Bos taurus* autosomes for variants associated with sacrum height in **a)** Montbéliarde, **b)** Normande, and **c)** Holstein bulls