

Figure S1 Calculated Pearson correlation coefficients of 34 significantly different proteins among 6 groups (Bai YN, Han YN, Han GS, Tibetan GS, Mongolian IN, and Uygur XJ) using  $\text{Log}_2$  LFQ.

Figure S2 The string interaction of 34 significantly different proteins in human milk serum among 6 groups (Bai YN, Han YN, Han GS, Tibetan GS, Mongolian IN and Uygur XJ). A and B are two group of significantly different proteins based on heatmap clustering.

Table S1 The detailed information of milk samples, including ethnicities, geography, age of mothers, delivery mode, parity, lactation days, and sex of baby.

Table S2 693 identified and quantified proteins in human milk serum from (Bai YN, Han YN, Han GS, Tibetan GS, Mongolian IN, and Uygur XJ).

Table S3 Significantly different proteins of each group in comparison to the other five groups