**Supplemental Figures and tables**

**Supplementary Table 1: MAP subject maternal and household clinical characteristics**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAP  sample ID | Gestational Age at Birth | Gender | | | Ethnicity | Maternal Age | | | Household Smoking | Household Pet | Older Siblings | Self-Reported antibiotic Use | | Maternal Atopy History |
| J7 | 32.5 | M | Hispanic | | | | 36 | No | | Dog | Yes | Yes | | No |
| J8 | 31.1 | F | Hispanic | | | | 28 | No | | No | Yes | Yes | | No |
| J9 | 27.4 | M | Hispanic | | | | 33 | No | | No | Yes | No | | No |
| J10 | 31.3 | M | Hispanic | | | | 31 | Yes | | No | Yes | No | | Asthma and seasonal allergies |
| J11 | 33.5 | M | | Hispanic | | | 30 | No | | Dog | Yes | No | No | | |
| J12 | 29.2 | M | | Hispanic | | | 24 | No | | Dog | No | No | No | | |

**Supplementary Figure 1:**

Peptide alignment maps of a) Felis Catus and b) Beta-Lactoglobulin

Timeline

Description automatically generated

Timeline

Description automatically generated

**Supplemental Figure 2 Relative Quantification Bovine Caseins**

Chart, bar chart

Description automatically generated

**MAP samples and non-hydrolyzed fortifier were quantified for bovine caseins. J11 (fortified preterm formula) and the formula sample showed the highest expression of bovine caseins.**