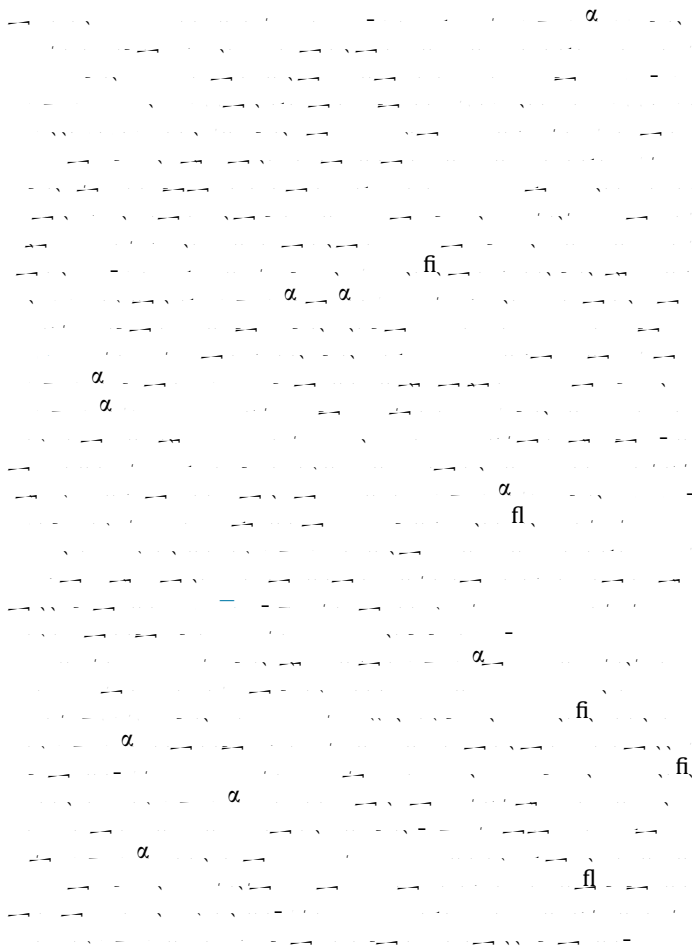
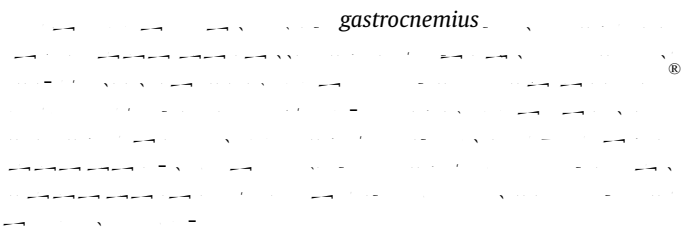


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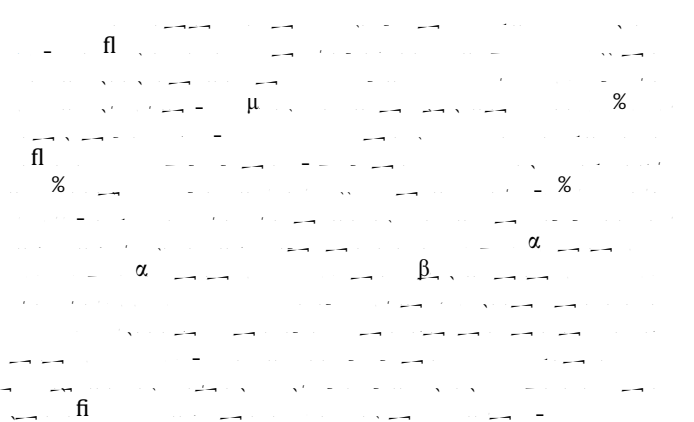
ARTICLE INFO	ABSTRACT
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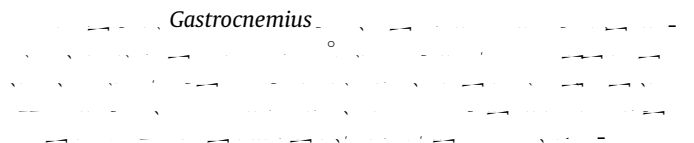
2.4. RNA extraction and RT-PCR



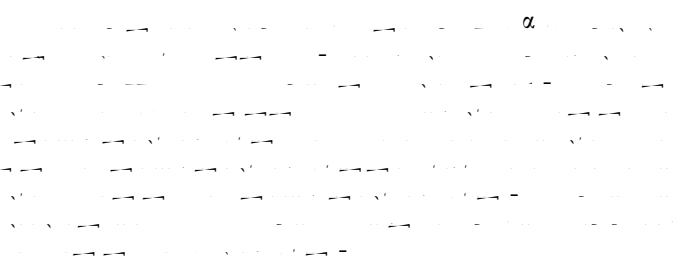
2.5. Western blotting analysis



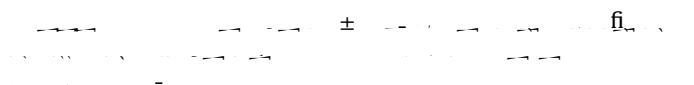
2.6. Tissue triglyceride and FFA analysis



2.7. Metabolite measurements

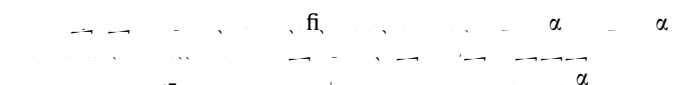


2.8. Statistical analysis



3. Results

3.1. High-efficiency ablation of AMPKα2 in skeletal muscle



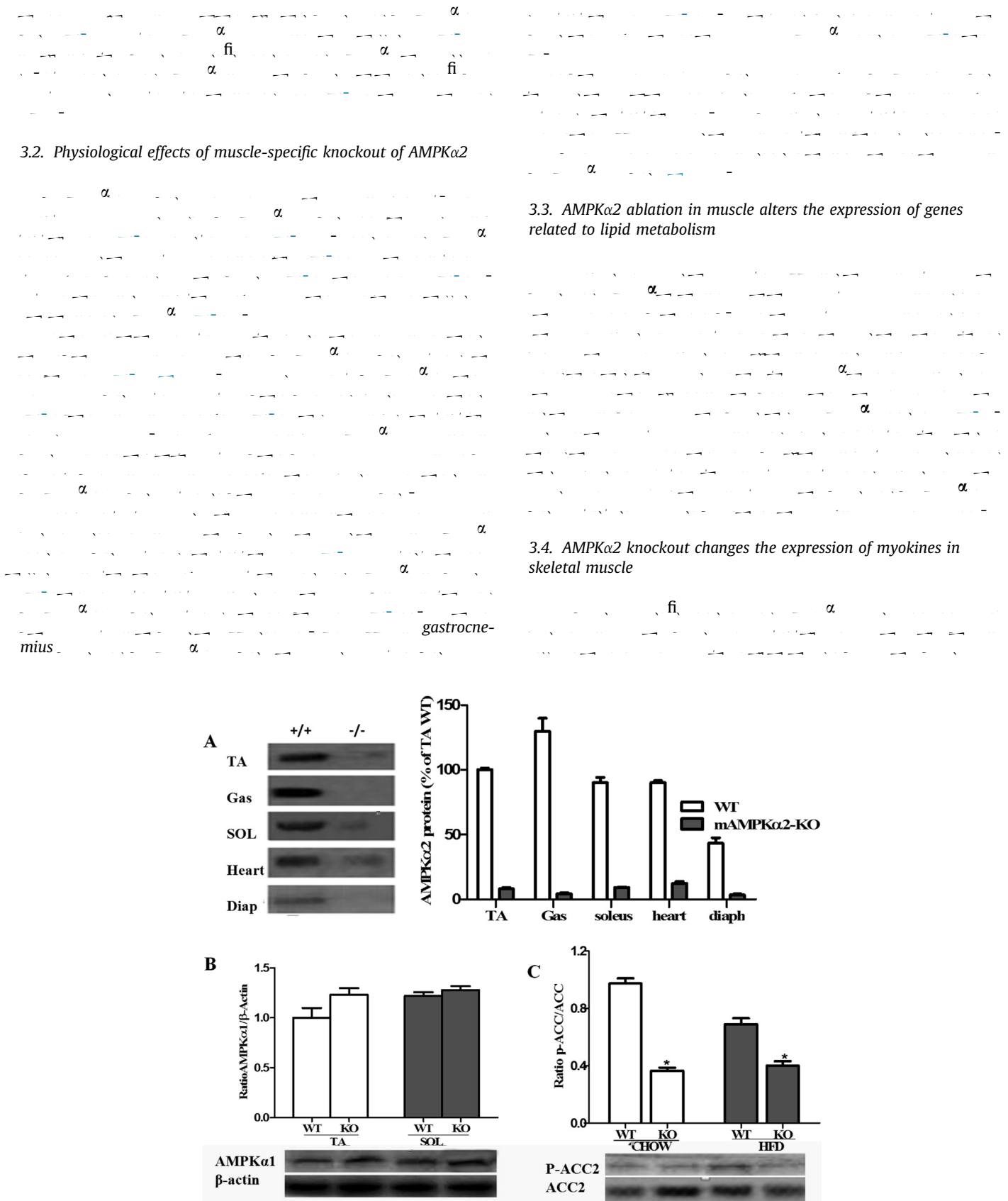


Fig. 1.

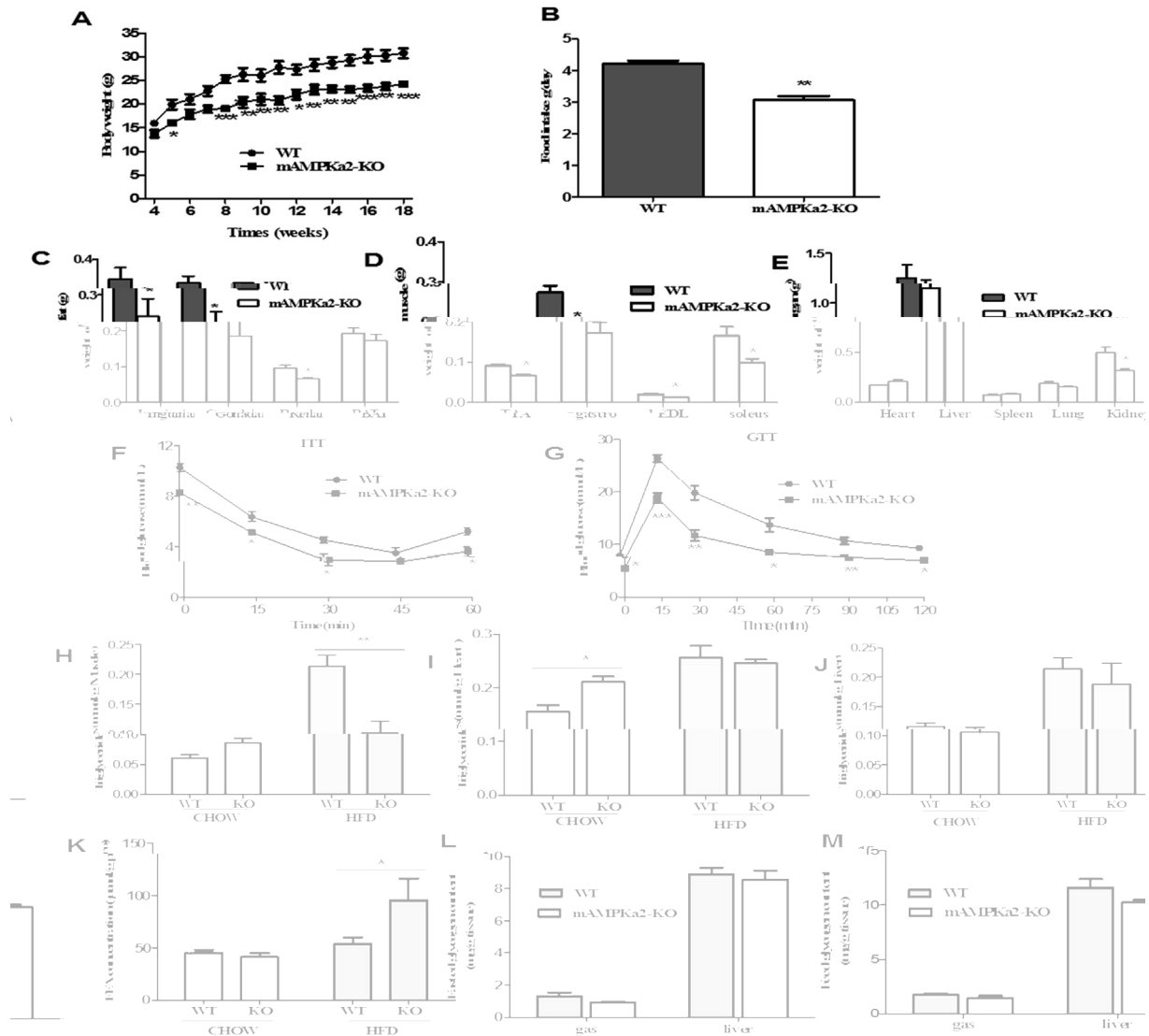


Fig. 2.

Fig. 2. Effects of mAMPKα2-KO on body weight, food intake, and metabolic parameters. (A) Body weight (g) over 18 weeks. (B) Food intake (g/day). (C) Insulin (μU/ml) over 18 weeks. (D) Glucose (mg/dl) over 18 weeks. (E) Lipid profile (mmol/L). (F) ITT (Insulin Tolerance Test). (G) GTT (Glucose Tolerance Test). (H) HDL-C (mmol/L). (I) LDL-C (mmol/L). (J) TG (mmol/L). (K) TC (mmol/L). (L) HDL-C (mmol/L). (M) TG (mmol/L). WT (black bars/circles), mAMPKα2-KO (white bars/circles). * p < 0.05, ** p < 0.01, *** p < 0.001.

Table 1

	WT	mAMPKα2-KO	WT	mAMPKα2-KO	WT	mAMPKα2-KO
Body weight (g)	30.0 ± 0.5	28.0 ± 0.5	32.0 ± 0.5	30.0 ± 0.5	34.0 ± 0.5	32.0 ± 0.5
Food intake (g/day)	4.2 ± 0.2	3.0 ± 0.2	4.5 ± 0.2	3.2 ± 0.2	4.8 ± 0.2	3.5 ± 0.2
Insulin (μU/ml)	0.35 ± 0.05	0.25 ± 0.05	0.38 ± 0.05	0.28 ± 0.05	0.42 ± 0.05	0.32 ± 0.05
Glucose (mg/dl)	180 ± 10	160 ± 10	190 ± 10	170 ± 10	200 ± 10	180 ± 10
LDL-C (mmol/L)	0.15 ± 0.02	0.10 ± 0.02	0.18 ± 0.02	0.12 ± 0.02	0.20 ± 0.02	0.15 ± 0.02
HDL-C (mmol/L)	0.08 ± 0.01	0.12 ± 0.01	0.09 ± 0.01	0.13 ± 0.01	0.10 ± 0.01	0.14 ± 0.01
TG (mmol/L)	0.12 ± 0.02	0.08 ± 0.02	0.13 ± 0.02	0.09 ± 0.02	0.14 ± 0.02	0.10 ± 0.02
TC (mmol/L)	0.25 ± 0.03	0.20 ± 0.03	0.26 ± 0.03	0.21 ± 0.03	0.28 ± 0.03	0.23 ± 0.03

4. Discussion

Our results show that mAMPKα2-KO mice have lower body weight, food intake, and insulin sensitivity compared to WT mice. This is consistent with the role of AMPK in regulating energy balance and metabolism. The mAMPKα2-KO mice also have lower levels of TG, TC, and LDL-C, and higher levels of HDL-C, suggesting a beneficial effect on lipid metabolism. These findings are consistent with the role of AMPK in regulating lipid metabolism and energy balance.

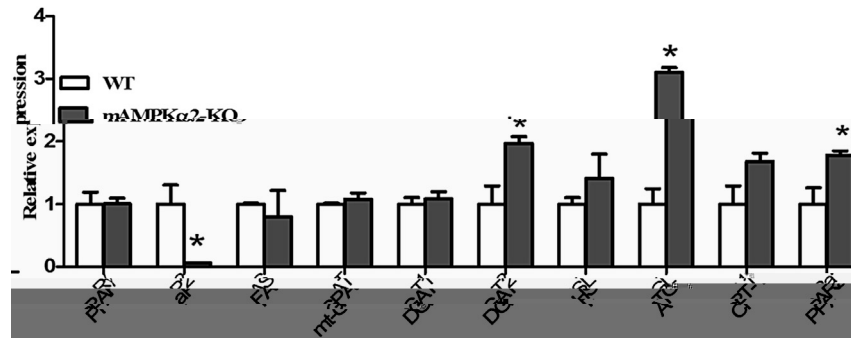


Fig. 3.

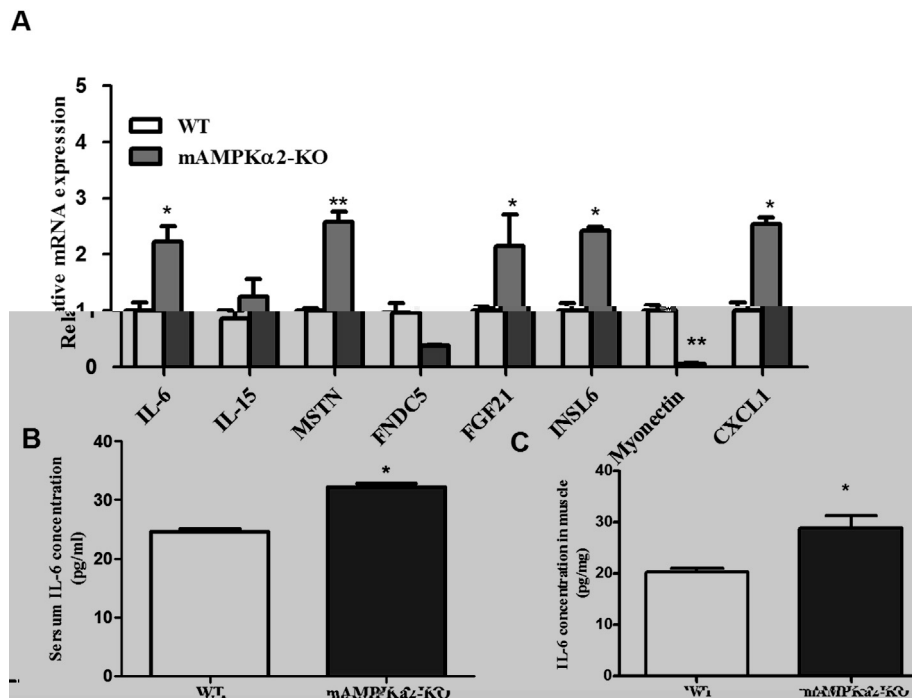


Fig. 4.

Referen

Acknowledgements

the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion. The number of illiterate people in the world is projected to reach 1.7 billion by the year 2015. The number of illiterate people in the world is projected to reach 1.7 billion by the year 2015.

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Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was plotted against the number of trials for each condition. The error bars represent the standard error of the mean.

the α -helix and β -sheet content of the protein. The α -helix content of the protein was calculated using the following equation: $\alpha\text{-helix content} = \frac{1}{100} \times \frac{1000 \times \text{CD}_{222}^{\text{obs}}}{\text{CD}_{222}^{\text{max}}}$, where $\text{CD}_{222}^{\text{obs}}$ and $\text{CD}_{222}^{\text{max}}$ are the observed and maximum molar ellipticity at 222 nm, respectively. The β -sheet content of the protein was calculated using the following equation: $\beta\text{-sheet content} = \frac{1}{100} \times \frac{1000 \times \text{CD}_{208}^{\text{obs}}}{\text{CD}_{208}^{\text{max}}}$, where $\text{CD}_{208}^{\text{obs}}$ and $\text{CD}_{208}^{\text{max}}$ are the observed and maximum molar ellipticity at 208 nm, respectively. The α -helix and β -sheet content of the protein were calculated using the following equation: $\alpha\text{-helix content} = \frac{1}{100} \times \frac{1000 \times \text{CD}_{222}^{\text{obs}}}{\text{CD}_{222}^{\text{max}}}$ and $\beta\text{-sheet content} = \frac{1}{100} \times \frac{1000 \times \text{CD}_{208}^{\text{obs}}}{\text{CD}_{208}^{\text{max}}}$.

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