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Effects of alfalfa saponin extract on mRNA expression of *LDLR*, *LXRα* and *FXR* in BRL cells

Key words: Alfalfa saponin extract, Hyperlipidemic BRL cells, Cholesterol metabolism, mRNA expression

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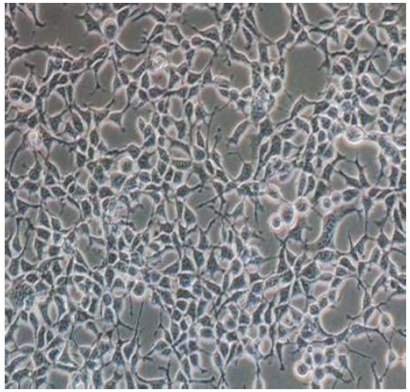
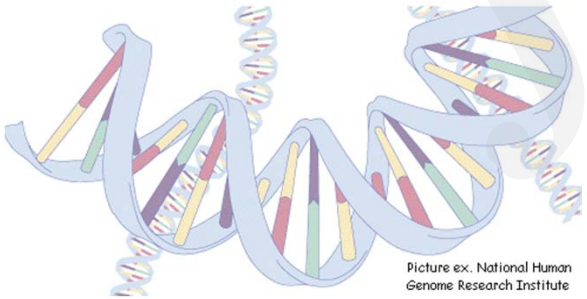
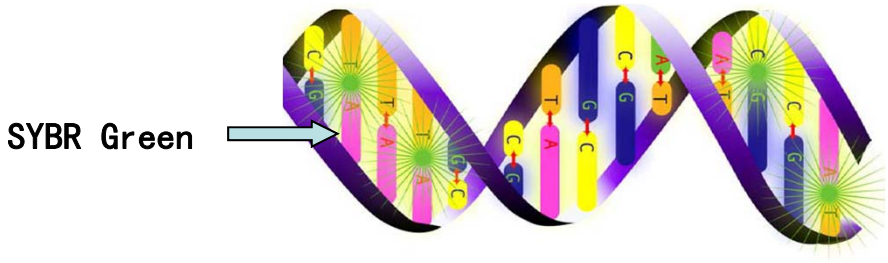
Research Summary

This study mainly focused on the effects of alfalfa saponin extract (ASE) on cholesterol metabolism at a cellular level by measuring mRNA expression of LDLR, LXRα and FXR in normal and hyperlipidemic BRL cells.



- **Cell culture and growth inhibition assay**
- **Hyperlipidemic cell model and grouping**
- **Quantitative real-time PCR**





Main points

ASE might ameliorate hepatic steatosis by regulating genes involved in cholesterol metabolism, including up-regulation of LDLR as well as down-regulation of LXRα and FXR.

Fig. 1 | Effects of ASE on proliferation activity of BRL cells.

Fig. 2 | Effects of ASE on mRNA expression of LDLR, LXRα and FXR in normal BRL cells

Fig. 3 | Effects of ASE on mRNA expression of LDLR, LXRα and FXR in hyperlipidemic BRL cells.

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