

hLGR5

品系全名	C57BL/6JSm0- <i>Lgr5</i> ^{tm1(hLGR5)Sm0c}
目录号	NM-HU-242949
品系状态	活体

基因信息

基因名 Lgr5	基因曾用名	FEX; Gpr49
	NCBI ID	14160
	MGI ID	1341817
	Ensembl ID	ENSMUSG00000020140
	人类同源基因	LGR5

品系描述

The endogenous mouse *Lgr5* gene was replaced by human LGR5 gene.

*使用本品系发表的文献需注明: hLGR5 mice (Cat. NO. NM-HU-242949) were purchased from Shanghai Model Organisms Center, Inc..

验证数据

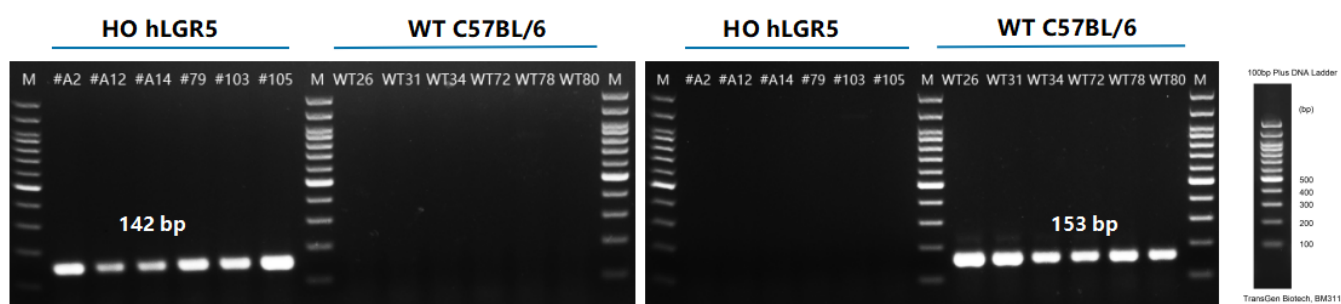


Fig.1 Detection of *LGR5* expression in frontal lobe by RT-PCR. Frontal lobe RNA was extracted from 8-year-old male WT C57BL/6 and homozygous hLGR5 knockin mice (n=3 in each group), then cDNA libraries were synthesized by reverse transcription, followed by PCR with mRNA primers. Mouse *Lgr5* mRNA (153 bp) was detectable only in wild-type C57BL/6 mice. Human *LGR5* mRNA (142 bp) was detectable only in homozygous hLGR5 knockin mice but not in wild-type mice.

Abbr. M, marker; HO, homozygous; WT, wild type.

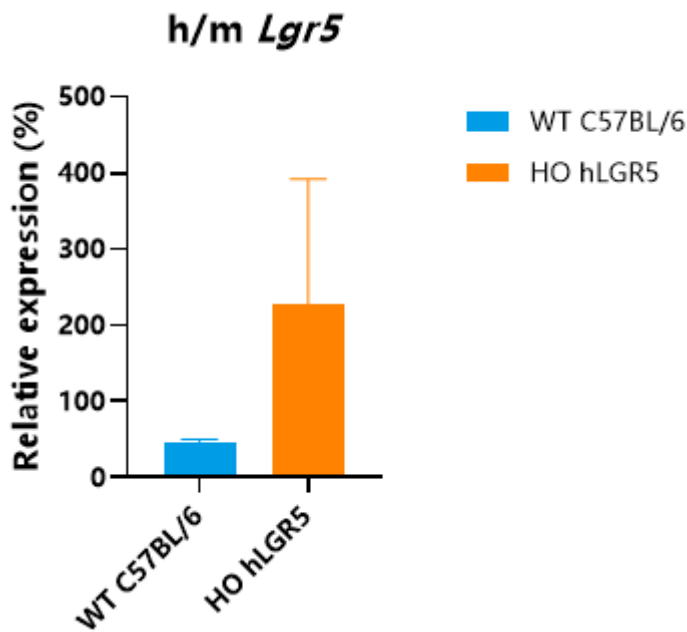


Fig.2 Detection of *LGR5* expression in frontal lobe by qPCR. Frontal lobe RNA were extracted from 8-year-old male WT C57BL/6 and homozygous hLGR5 knockin mice (n=3 in each group), then cDNA libraries were synthesized by reverse transcription, followed by qPCR with h/m *Lgr5* and mouse *Gapdh* primers. Relative expression represents the *Lgr5* mRNA level relative to its average expression in WT mice. *Lgr5* mRNA was expressed similarly in wild-type mice and homozygous hLGR5 knockin mice by detecting with a h/m *Lgr5*-shared primer.

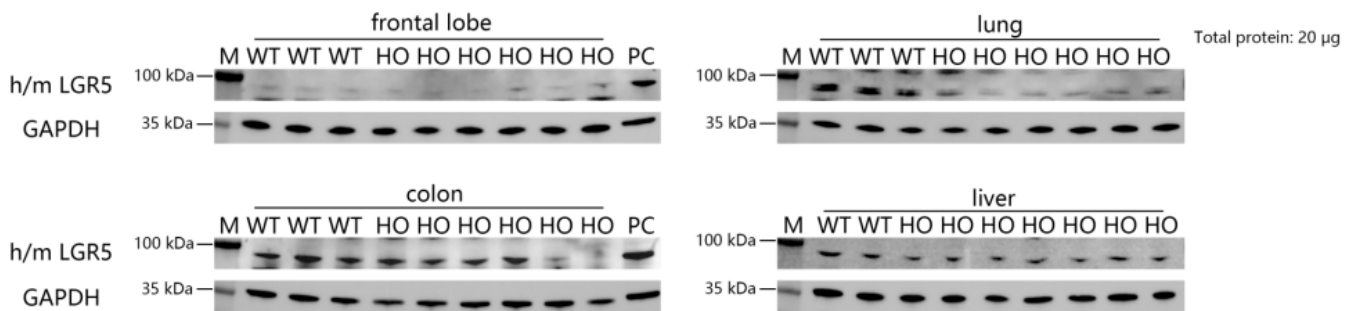


Fig.3 Detection of *LGR5* expression in hLGR5 mice by WB. The frontal lobe, lung, colon and liver tissue lysates were collected from 9-week-old male wild-type C57BL/6 mice and homozygous hLGR5 mice, and then analyzed by western blot with anti-LGR5 antibody. LGR5 was clearly detected in the lung, colon, and liver tissues, with low expression in the frontal lobe tissues of both WT C57BL/6 and HO hLGR5 mice, as the antibody was cross-reactive with both human and mouse LGR5.

Abbr. HO, homozygous; WT, wild type; PC, positive control, HepG2 cells.

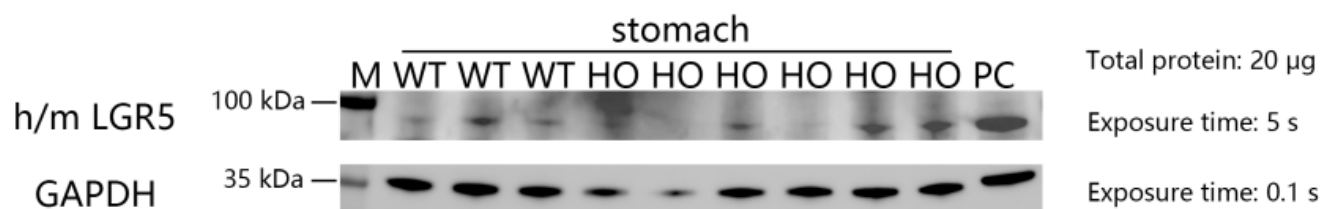


Fig.4 Detection of LGR5 expression in hLGR5 mice by WB. The stomach tissue lysates were collected from 9-week-old male WT C57BL/6 mice and homozygous hLGR5 mice, then analyzed by western blot with anti-LGR5 antibody. LGR5 was detectable in stomach from both WT C57BL/6 and HO hLGR5 mice, as the antibody was cross-reacted between human and mouse LGR5.

Abbr. HO, homozygous; WT, wild type; PC, positive control, HepG2 cells.