Parameter	Control - Alcoholic hepatitis
PIGR	P=0,0054*
IgA	P=0,0092*
PIGR-IgA colocalization	P=0,0186*
PIGR hepatocytes	P=0,0061*
PIGR biliary diffuse	P=0,0108*
PIGR biliary apical/luminal	P=0,0265*

Table S1. P-values Figure 1 and Figure S1.

Parameter	Females	Males
	Wt - *pIgR*$^{-/-}$	**Wt - *pIgR*$^{-/-}$**
Fecal IgA	P<0,0001*	P=0,0003*
Plasma IgA	P<0,0001*	P<0,0001*
Liver/body weight	P=0,0054*	P=0,0362*
ALT	P=0,0159*	P=0,0354*
Hepatic triglycerides	P=0,0308*	P=0,0220*
Oil Red O+	P=0,0306*	P=0,0149*
Hepatic *Cxcl1* (*18S*)	P=0,0499*	P=0,0262*
Hepatic *Cxcl2* (*18S*)	P=0,0673	P=0,0321*
Hepatic *Ccr2* (*18S*)	P=0,0114*	P=0,0516
Hepatic *Cd11b* (*18S*)	P=0,0187*	P=0,0321*
Mac1+	P<0,0001*	P<0,0001*
Food intake	P=0,1615	P=0,7326
Plasma EtOH	P=0,8058	P=0,5464
Plasma acetate	P=0,9351	P=0,4063
Hepatic *Adh1* (*18S*)	P=0,7216	P=0,4000
Hepatic *Cyp2e1* (*18S*)	P=0,3166	P=0,9328
Hepatic *Cxcl1* (*Ppib*)	P=0,0480*	P=0,0214*
Hepatic *Cxcl2* (*Ppib*)	P=0,0366*	P=0,0636*
Hepatic *Ccr2* (*Ppib*)	P=0,0350*	P=0,0070*
Hepatic *Cd11b* (*Ppib*)	P=0,0098*	P=0,0313*
Hepatic *Adh1* (*Ppib*)	P=0,4918	P=0,5732
Hepatic *Cyp2e1* (*Ppib*)	P=0,2710	P=0,4868

Table S2. P-values Figure 2 and Figure S2.

Parameter	Isocaloric	Ethanol	
	Wt - *plgR*$^{-/-}$	**Wt - *plgR*$^{-/-}$**	
Fecal IgA	P=0,0024*	P=0,0002*	
Plasma IgA	P=0,0001*	P<0,0001*	
Liver/body weight	P=0,0106*	P=0,0031*	
ALT	P=0,2078	P=0,0446*	
Hepatic triglycerides	P=0,7461	P=0,0313*	
Oil Red O+	P=0,7447	P=0,0024*	
Hepatic *Cxcl1* (*18S*)		P=0,0063*	
Hepatic *Cxcl2* (*18S*)		P=0,0688	
Hepatic *Ccr2* (*18S*)		P=0,0471*	
Hepatic *Cd11b* (*18S*)		P=0,0324*	
Hepatic *Col1a1* (*18S*)		P=0,0187*	
Hepatic *Timp1* (*18S*)		P=0,0194*	
Sirius Red+		P=0,0060*	
Plasma LPS		P=0,0023*	
Total hepatic bacteria		P=0,0415*	
Fecal *E. coli* cultures		P=0,0391*	
Hepatic *E. coli* (*16S*)		P=0,0425*	
Food intake	P=0,3559	P=0,4364	
Plasma EtOH		P=0,3906	
Plasma acetate		P=0,2502	
Hepatic *Adh1* (*18S*)		P=0,6553	
Hepatic *Cyp2e1* (*18S*)		P=0,6876	
Hepatic *Cxcl1* (*Ppib*)		P=0,1203	
Hepatic *Cxcl2* (*Ppib*)		P=0,02296*	
Hepatic *Ccr2* (*Ppib*)		P=0,0494*	
Hepatic *Cd11b* (*Ppib*)		P=0,0357*	
Hepatic *Col1a1* (*Ppib*)		P=0,0376*	
Hepatic *Timp1 (Ppib*)		P=0,0293*	
Hepatic *Adh1* (*Ppib*)		P=0,2008	
Hepatic *Cyp2e1* (*Ppib*)		P=0,3392	
	Pre-sort - IgA^{-}	**Pre-sort - IgA^{+}**	**IgA^{-} - IgA^{+}**
IgA+ bacteria	P=0,0116*	P<0,0001*	P<0,0001*
***E. coli* (*16S*)**			P=0,0049*

Table S3. P-values Figure 3 and Figure S3.

Parameter	*pIgR*$^{-/-}$
	Control - ABX
Fecal IgA	P=0,2835
Plasma IgA	P=0,1580
Liver/body weight	P=0,7972
ALT	P=0,0424*
Hepatic triglycerides	P=0,2072
Oil Red O+	P=0,2427
Hepatic *Cxcl1* (*18S*)	P=0,0484*
Hepatic *Ccr2* (*18S*)	P=0,0176*
Hepatic *Cd11b* (*18S*)	P=0,0340*
Hepatic *Ccl2* (*18S*)	P=0,0369*
Mac1+	P=0,0024*
Food intake	P=0,0691
Plasma EtOH	P=0,2259
Plasma acetate	P=0,5620
Hepatic *Adh1* (*18S*)	P=0,1698
Hepatic *Cyp2e1* (*18S*)	P=0,3555
Hepatic *Cxcl1* (*Ppib*)	P=0,0358*
Hepatic *Ccr2* (*Ppib*)	P=0,0253*
Hepatic *Cd11b* (*Ppib*)	P=0,1988
Hepatic *Adh1* (*Ppib*)	P=0,9074
Hepatic *Cyp2e1* (*Ppib*)	P=0,9496

Table S4. P-values Figure 4 and Figure S4.

Parameter	Wt GFP - *pIgR*$^{-/-}$ GFP	*pIgR*$^{-/-}$ GFP - *pIgR*$^{-/-}$ pIgR	Wt GFP - *pIgR*$^{-/-}$ pIgR
Fecal IgA	P<0,0001*	P=0,0003*	P<0,0001*
Plasma IgA	P<0,0001*	P=0,6049	P<0,0001*
Liver/body weight	P=0,8185	P=0,5390	P>0,9999
ALT	P=0,0056*	P=0,0010*	P>0,9999
Hepatic triglycerides	P=0,0427*	P=0,0057*	P=0,8963
Oil Red O+	P=0,0528	P=0,0042*	P=0,6845
Hepatic *Cxcl1* (*18S*)	P=0,0455*	P=0,3739	P=0,8883
Hepatic *Cxcl2* (*18S*)	P>0,9999	P=0,1463	P=0,5572
Hepatic *Ccr2* (*18S*)	P>0,9999	P=0,0473*	P=0,1617
Plasma LPS	P=0,0088*	P=0,0442*	P=0,8363
Hepatic *pIgR* (*18S*)	P=0,0012*	P=0,0011*	P=0,0046*
Plasma EtOH	P>0,9999	P=0,5050	P>0,9999
Plasma acetate	P>0,9999	P>0,9999	P=0,7542
Hepatic *Adh1* (*18S*)	P=0,9818	P=0,4683	P>0,9999
Hepatic *Cyp2e1* (*18S*)	P>0,9999	P=0,9729	P>0,9999
Hepatic *Cxcl1* (*Gapdh*)	P=0,0054*	P=0,0085*	P>0,9999
Hepatic *Cxcl2* (*Gapdh*)	P=0,4115	P=0,0161*	P=0,4785
Hepatic *Ccr2* (*Gapdh*)	P=0,0659	P=0,0463*	P>0,9999
Hepatic *Adh1* (*Gapdh*)	P>0,9999	P>0,9999	P>0,9999
Hepatic *Cyp2e1* (*Gapdh*)	P>0,9999	P>0,9999	P>0,9999

Table S5. P-values Figure 5 and Figure S5.