



Acute liver failure mouse models: targeting liver cell death

Physiogenex provides several acute liver failure models to rapidly screen your compounds targeting liver cell death (apoptosis and necroptosis)

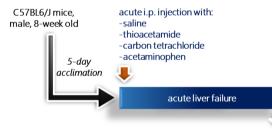
Key benefits

✓ <u>Get an extremely fast evaluation of the efficacy of your drugs</u> targeting liver cell death in our validated acute liver failure models.

EXPERIMENTAL DESIGN

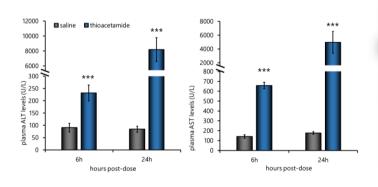
Background strain: C57BL6 mice

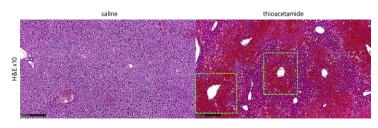
- Acute liver failure induction with: thioacetamide (TAA), carbon tetrachloride (CCl₄), acetaminophen (APAP), other chemicals available: d-galactosamine (d-galN), diethylnitrosamine (DEN), ethanol (EtOH), anti-CD95 (Fas) – please contact us
- In life study duration: 1 week (acclimation and in vivo study)
- Parameters evaluated: biochemistry (ALT, AST, LDH, albumin, etc.), histology (H&E staining, TUNEL, Ki67, etc.), western blot analysis (p-JNK)
- Positive control: please contact us



-plasma transaminases at 6 and 24 hours post i.p. -liver histology at 24 hours

THIOACETAMIDE

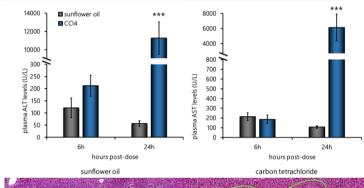




- •Upper panel: plasma ALT and AST levels at 6 hours and 24 hours after an acute thioacetamide i.p. injection in C57BL6/J mice.
- •Lower panel: liver hematoxylin & eosin (H&E) staining at time 24 hours after an acute thioacetamide i.p. injection.

Green dashed squares indicate severe and relatively extensive acute hepatocellular hemorrhagic and coagulative necrosis.

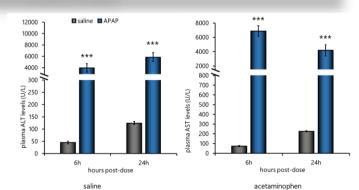
CARBONE TETRACHLORIDE





- •Upper panel: plasma ALT and AST levels at 6 hours and 24 hours after an acute CCl4 i.p. injection in C57BL6/J mice.
- •Lower panel: liver hematoxylin & eosin (H&E) staining at time 24 hours after an acute CCl4 i.p. injection. Green circles indicate extensive and severe centrilobular to bridging acute hepatocellular coagulative necrosis.

ACETAMINOPHEN



HARK XID

- •Upper panel: plasma ALT and AST levels at 6 hours and 24 hours after an acute acetaminophen i.p. injection in C57BL6/J mice.
- •Lower panel: H&E staining at time 24 hours after an acute acetaminophen i.p. injection. Areas between arrows indicate extensive and severe centrilobular to bridging acute hepatocellular coagulative necrosis (between arrows).