





Infant rabbit model of Shiga-Toxin producing Escherichia coli enteritis

Procedure Summary

- Infant (2 days-old) New Zealand rabbits
- Shiga Toxin-producing E. coli strain
- Oral bacterial challenge
- Reference compounds: Test molecule

Experimental readouts

- Bacterial load in all segments of digestive tract, spleen and kidneys
- Weight loss
- T°C, dehydration
- Clinical disease severity score
- Diarrhea score
- Macroscopic score
- Histology (intestine, kidney ...)

Optional Services

- CRP, Elisa
- Blood collection for biologics analysis
- Detection of Shiga toxin

References

- Ritchie et al., Infection & Immunity. 2003
 « Critical Roles for stx2, eae, and tir in
 Enterohemorrhagic Escherichia coli-Induced
 Diarrhea and Intestinal Inflammation in Infant
 Rabbits »
- Internal Data

Animal Welfare

 Each experimental protocol is approved by the local ethics committee for animal experimentation of Grand Campus Dijon (Burgundy, France) and performed in accordance to the current recommendations of the European Institute of Health EU Directive 86/609.

Facilities

 These assays are performed at our BSL2/3 laboratory / zootechnical center in Dijon, France

Efficacy of test molecule compared to buffer in infants' rabbits of digestive infection/colonization induced by STEC

