



Muscles / adipocytes *ex vivo* glucose uptake

A simple and rapid technique for assessing your compound's direct effect on glucose uptake in type 2 diabetes and/or obesity.

This method can be used both for medium throughput screening and for initial *ex vivo* proof-of-concept.

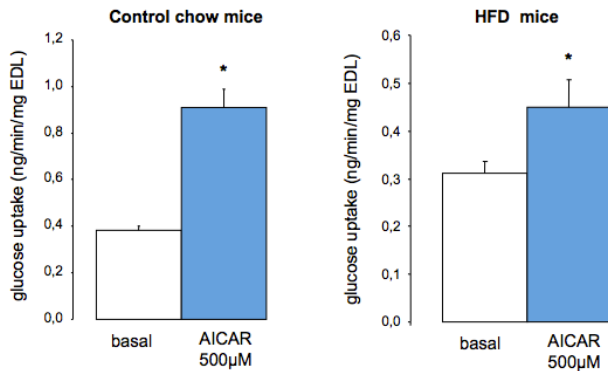
Key benefits :

- ✓ **In-house validated technique**
- ✓ Ex vivo validation on glucose uptake in isolated muscles (a major contributor to blood glucose control).
- ✓ Ex vivo validation on glucose uptake in isolated adipocytes for drugs targeting these cells.
- ✓ Insights into obesity and/or insulin resistance.
- ✓ Select your best candidates with an inexpensive, reproducible and rapid technique before launching *in vivo* validation.

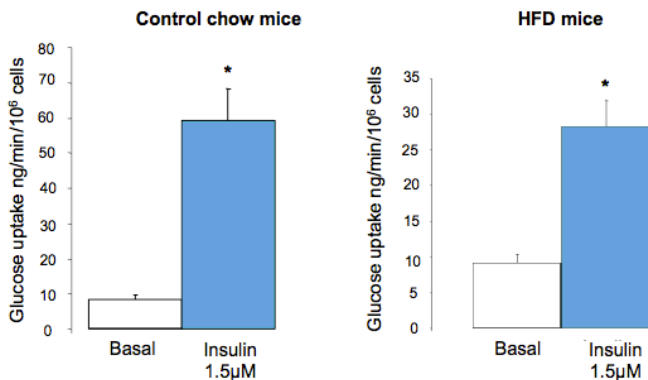
DESCRIPTION AND PARAMETERS EVALUATED

- Species: rat, mouse, hamster

Glucose uptake in isolated mouse muscles after 12 weeks of diet



Glucose uptake in isolated mouse adipocytes after 12 weeks of diet



* p < 0.05 vs basal

ADD-ON STUDIES

- Basal glucose turnover and/or
- Euglycemic hyperinsulinemic clamp + ³H-glucose for *in vivo* validation

REFERENCES

- Viollet B. et al, J. Clin Invest, 111: 3554-63, 2003
- Duplain H. et al, Circulation 104: 342-5, 2001