

TECHNICAL NOTES

Human Islets For Research (HIR)

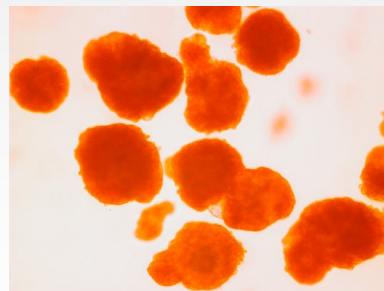
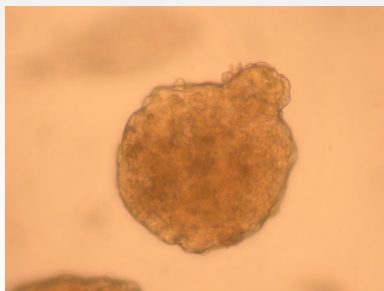
Description

Human Islets for Research (HIR)[®] are primary human islets processed from organ donor pancreases that have been approved for research but not for clinical transplantation of either the pancreas or the isolated islets. HIR[®] are obtained in a proprietary process of pancreas digestion and islet purification that results in uniformly high quality HIR[®] for delivery to diabetes investigators. Quality Control (QC) testing is routinely performed prior to release to assure uniform quality and function of these islets available for research. Since Prodo Labs is not involved in clinical transplantation, all of the islets processed are available for research and distribution, rather than only a portion that may become available as not meeting clinical requirements. HIR[®] shipments to corporate clients can be done on a Preferred Recipient status or on an Ad Hoc basis. HIR[®] for academic researchers are through the JDRF funded investigator programs. Additional access to HIR[®] can be discussed directly with Prodo Labs. Laboratory results from recent HIR[®] lots are presented on the back.

Uniqueness

- Primary HIR[®] are processed specifically for research studies and not for clinical applications
- Quality Control test results sent with HIR[®] and recipient test results requested to be returned
- HIR[®] QC testing available for Glucose Stimulated Insulin Release, Islet Image Analysis, and others
- Controlled release criteria assure minimal lot to lot variation of HIR[®] for ongoing research
- Shipping to research centers under controlled temperature & Prodo Labs unique PIM(T)[®] transport media

Animal Islets also available: Neonatal Pigs, Rats and Mice



Outcomes

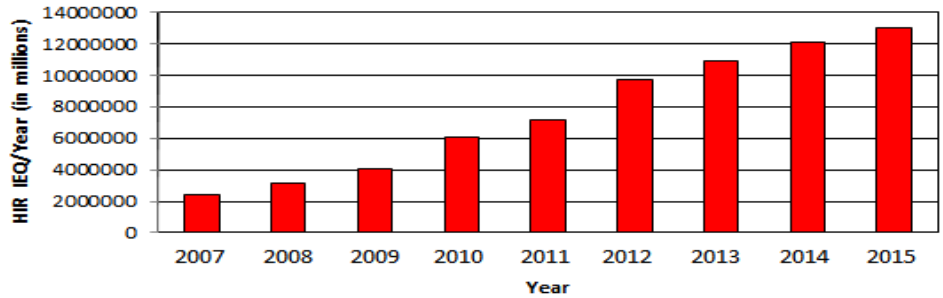
HIR Delivered to Date:

- 2007 – 2,400,000
- 2008 – 3,100,000
- 2009 – 4,050,000
- 2010 – 6,100,000
- 2011 – 7,125,000
- 2012 – 9,525,000
- 2013 – 10,900,000
- 2014 – 12,100,000
- 2015 – 13,050,000
- Improvements in reagents & media increasing yields in 2009

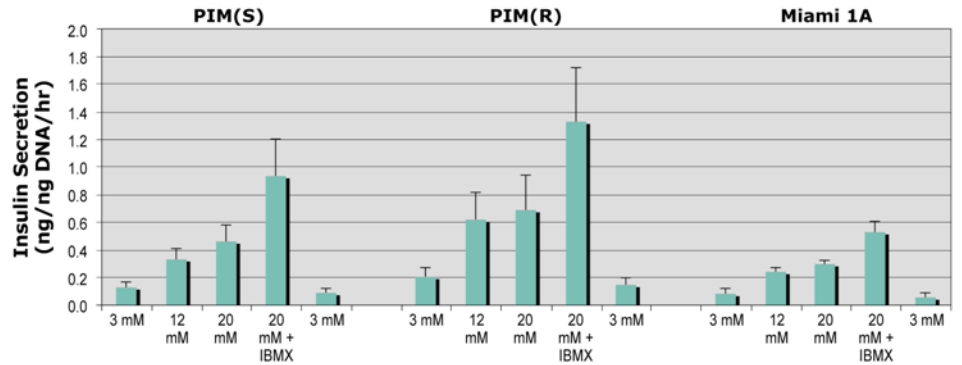
Summary of Recent Human Pancreas Processing into HIR

- Average Yields of HIR per pancreas (n=10)
- Use of Prodo Labs new Islet Culture media, PIM(R)® & PIM(S)®, to improve islet recovery after isolation and to improve islet function

Human Islets For Research (HIR)-IEQ/Year



SGS Insulin Secretion



Average Human Islet Yields

