

Testing Services

Islet Testing Authority (ITA)

Description

Prodo Laboratories is pleased to announce that a new division has been established that is The Islet Testing Authority, or ITA. The purpose of this division is to provide a service for testing tissue culture media, factors, reagents, and pancreas processing solutions, enzymes, and reagents on human islets to confirm not only their effectiveness, but also their lack of toxicity. Both research and commercial products can be tested by the ITA to confirm their potential utility for islet research and transplantation prior to use.

Routine Testing

The following tests are routinely offered to provide approval for products used in pancreas processing and islet culture:

Dithizone Staining – Objective degrees of staining and patterns of staining are documented.

Rapid Viability Test – Ethidium bromide and Fluorescein diacetate are used to stain the islets following short term (4 hours) and long term (overnight) of exposure to specific test agents.

Islet Purity – This test uses DTZ staining to confirm the maintenance of staining after contact with agents.

Compactness – The degree of islet compactness and rounding up is documented on a scaled set of observations.

SGS Test – After exposure to the agents, the SGS (Static Glucose Stimulation) test is performed on control and treated islets to determine the effect on human islets compared with controls.

Islet Counting – Human islets are counted manually after different treatments to document their maintenance of their mass in control and treated islets.

Image Analysis – Human islets are scanned to determine islet mass and results compared with islet counting for control and treated islets.

Animal Testing

Diabetic Nude Mouse Implants – A standardized streptozotocin diabetes model in nude mice has been developed for routine testing of control and treated human islets and followed for up to 30 days.

ITA Approval

Once all of the tests are completed, criteria for approval are reviewed for each test and a final score is determined. If the test agent results in a score for approval, then ITA will issue a dated ITA approval document and seal that can be applied to that test agent's marketing and labeling information.

