

Purified Human Pancreatic Islet: Viability Estimation of Islet Using Fluorescent Dyes, Attachment I, Preparation of Fluorescein Diacetate and Propidium Iodine Solutions – Standard Operating Procedure of the NIH Clinical Islet Transplantation Consortium

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Document Title: PURIFIED HUMAN PANCREATIC ISLETS, VIABILITY ESTIMATION OF ISLETS USING FLUORESCENT DYES, ATTACHMENT I, PREPARATION OF FLUORECEIN DIACETATE AND PROPIDIUM IODIDE SOLUTIONS				

1.0 Stock Fluorecein Diacetate (FDA) Solution (24 µM)

Calculation:

FDA FW = 416.4 Stock Concentration = 24 µM Volume required = 200 mL
 FW X Concentration X Volume = (416.4) X (24 x 10⁻⁶) X (200 x 10⁻³) = 0.00199 g FDA

Components	Quantity to be Added	Quantity Added	Supplier & Lot Number	Expiration Date
FDA	0.00199 g	g		
Acetone	200 mL	mL		

- Store Stock FDA solution at ≤ -20°C for up to six months.
- Cover it with aluminium foil, as the dye is light sensitive.
- Label with assigned lot number, date of expiration and initials of preparer.

Assigned Lot Number: _____

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

2.0 Stock Propidium Iodide (PI) Solution (750 µM)

Calculation:

PI FW = 668.4 Stock Concentration = 750 µM Volume Required = 25 mL
 FW X Concentration X Volume = (668.4) X (750 x 10⁻⁶) X (25 x 10⁻³) = 0.0125 g PI

Components	Quantity to be Added	Quantity Added	Supplier & Lot Number	Expiration Date
PI	0.0125 g	g		
DPBS	25 mL	mL		

- Store Stock PI solution at 2° to 8°C for up to six months.
- Cover it with aluminium foil, as the dye is light sensitive.
- Label with assigned lot number, date of expiration and initials of preparer.

Assigned Lot Number: _____

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____