



Intermountain Forensics

SOP #	RGT-200
Revision #	01
Forensic DNA Technical Leader Approval	
Issue Date	
5/21/20	

Reagents

1. Purpose

This document details procedures for reagent receiving, barcode naming convention and critical reagent identification.

2. Summary

Reagents are received and logged by manufacturer lot number. The lot number and expiration date are used to create a unique barcode for the lot. Description of reagent receiving, labeling, function, expiration and critical nature is described.

3. Procedure

1. Reagent Receiving
 - a. Check the Reagent Log document. (RGT-300)
 - i. If the lot number has not been previously received, add the new lot number and expiration date to the log and mark for Quality Control Check. Store in the proper location.
 - ii. If the lot number has already been received, store in the proper location.
2. Reagent Barcodes
 - a. **Barcode Name-Lot #-EXP Date** EX: EZ1-16305115-EXP 9/16/20
 - b. For reagents that are bundled together by the manufacturer, use the bundle Lot number.
3. Quality Control Check (QC)
 - a. Reagents designated as **Critical** require QC.
 - b. QC is performed by testing the reagent with a known sample.
 - c. QC must be performed on a newly received lot before it is used for casework.
 - i. QC results must fall within established limits or be approved and documented by the DNA Technical Leader
4. Making Reagent Working Solutions:
 - a. When multiple reagents are combined to make a Working Solution.
 - b. Expiration date as listed in the reagent chart below or the earliest expiration date of the parent reagents, whichever is earliest.
5. Reagent Use:
 - a. Reagents may only be used on casework if not expired.
 - b. Expired reagents may be used for training.
6. Reagent Chart:
 - a. Note: source is only a reference to guide restocking. The laboratory can receive these reagents from other sources if it is of equal quality

Kit	Reagent	Barcode Name	Critical?	Expiration Info	Source
---	TE	TE	N	1 Year (or date if provided by mfg)	Fisher Bioreagents
---	Water	H2O	N	2 years after filtration	University of Utah
---	DTT Powder	DTTP	N	1 year	RPI Research Products
	DTT Solution	DTTS	N	3 months	Working Solution
M-VAC	Sterile Collection Solution	SCS	N	1 year (or date if provided by mfg)	M-Vac Systems, Inc.
EZ1 Investigator	Cartridge, ProK, cRNA, 11mL G2	EZ1	N	Expiration Date on Q-card	Qiagen
	cRNA Solution	cRNA	N	3 Months	Working Solution



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	ATL Buffer	ATL	N	Expiration Date on Q-card	Qiagen
	Diluted ATL	dATL	N	Expiration of earliest dATL component	Working Solution
	MTL Buffer	MTL	N	Expiration Date on Q-card	Qiagen
	G2 Buffer 260mL	G2	N	Expiration Date on Q-card	Qiagen
Quantiplex Pro	Primer Mix, Reaction Mix, Control DNA, Dilution Buffer	QPP	Y	Expiration date on kit.	Qiagen
	Control Dilution	QPPS	N	2 Weeks	Working Solution
Quant Trio	Primer Mix, Reaction Mix, Control DNA, Dilution Buffer	QT	Y	Expiration date on outer sleeve.	ThermoFisher
	Control Dilution	QTS	N	2 Weeks	Working Solution
Globalfiler	Primer Mix, Reaction Mix, Positive Control, Allelic Ladder	GF	Y	Expiration date on outer sleeve.	ThermoFisher
	Positive Control Dilution	GFPC	N	2 Weeks	Working Solution
	GeneScan™ 600 LIZ™ Size Standard v2.0	LIZ600	Y	Expiration date on package	ThermoFisher
Globalfiler Express	Primer Mix, Reaction Mix, Positive Control, Allelic Ladder	GFE	Y	Expiration date on outer sleeve.	ThermoFisher
	Prep-n-Go	PnG	N	Expiration date on box	ThermoFisher
Investigator 24Plex	Primer Mix, Reaction Mix, DNA Size Standard 24plex (BTO), Positive Control, Allelic Ladder	INV	Y	Expiration date on box	Qiagen
	Positive Control Dilution	INVPC	N	2 Weeks	Working Solution
Investigator Go!	Primer Mix, Reaction Mix, DNA Size Standard 24plex (BTO), Positive Control, Allelic Ladder	INVGO	Y	Expiration date on box	Qiagen
YFiler Plus	Primer Mix, Reaction Mix, Positive Control, Allelic Ladder	YFP	Y	Expiration date on outer sleeve.	ThermoFisher
3500	Anode Buffer	N/A	N	Expiration date built into RFID tag	ThermoFisher
	Cathode Buffer	N/A	N	Expiration date built into RFID tag	ThermoFisher
	Pop 4	N/A	N	Expiration date built into RFID tag	ThermoFisher
	HiDi Formamide	HiDi	N	Expiration date on packaging	ThermoFisher
	Conditioning Reagent	N/A	N	Expiration date built into RFID tag	ThermoFisher

4. References

EZ1® DNA Investigator® Handbook
 Investigator® Quantiplex® Pro Handbook
 Quantifiler™ HP and Trio DNA Quantification Kits USER GUIDE
 GlobalFiler™ PCR Amplification Kit USER GUIDE



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GlobalFiler™ Express PCR Amplification Kit USER GUIDE

Yfiler™ Plus PCR Amplification Kit USER GUIDE

Investigator® 24plex QS Handbook

TECHNICAL MANUAL PowerPlex® Fusion System for Use on the Applied Biosystems® Genetic Analyzers

TECHNICAL MANUAL PowerPlex® Fusion 6C System for Use on the Applied Biosystems® Genetic Analyzers

5. Definitions

Critical Reagent: Reagents deemed as critical must be QC and approved before use.

Working Solution: A working solution is a prepared reagent that utilizes reagent components combined to create a reagent that will be used in day-to-day activities.