Nuclear Medicine / PET

Radiation Safety







A radical new solution for quality control of PET radiotracers

The Tracer-QC is a completely automated solution for reporting on 10 QC tests associated with PET and SPECT radiotracers, utilizing only an optical plate reader, a pipetting robot and a set of simple-to-handle consumables.

Ease of Compliance

- No chance of missing a process, record or signature.
- Objective measurements traceable to standards, without any human interaction.
- Data flow from measurement to batch record.
 - Automated.
 - Uneditable.
 - Completely traceable.
- Regular, automated suitability testing with a permanent record.
- The Tracer-QC enables FDA 21 CFR Part 11 (Electronic Signatures) and Part 212 (GMP) compliance.
- No cross-contamination, as the sample never leaves the disposable kits.
- Ease of (FDA or internal) audits with instantaneous data retrieval.

Cost Reduction

- Cumulative annual QC cost reduction of 30% or more.
- Fewer and less skilled personnel required.
- Faster and cheaper training.
- Faster and cheaper audits.
- Remote access/auditing of records.
- Minimize the cost of addressing 483's.
- Reduce risk of 483's by around 84%.
- One analytical instrument to maintain.

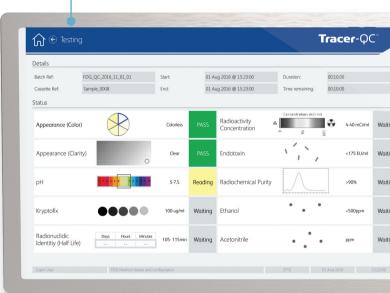
Improved Safety

- Reduced risk of radioactive spills and contamination.
- Reduced personnel exposure.
- Single sample.

Easy to use compliant software

The Tracer-QC software enables FDA 21 CFR Part 11 (Electronic Signatures) and Part 212 (GMP) compliance.

- Electronic signatures.
- Audit trial.
- Access Levels.
- Maintenance Records.
- Automatic Print.
- Export to PETra LIMS, other third party software and Microsoft Excel.





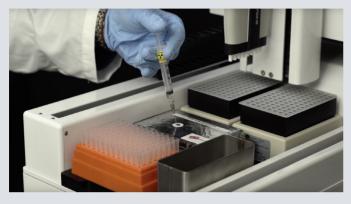
Improved Efficiency

1 electronic report with all QC results, • automatically generated. Rapid QC results. • Increased throughput to enable scale-up. • No cleaning or equilibration required . due to a disposable kit. **QC** tests Inventory reduction, eliminating need to track individual . expiry dates of multiple supplies/standards. ✓ Color ✓ Clarity Process standardization across sites and/or products. • **Iracer-**QC Single sample injection for 10 analyses. ✓ pH • Kryptofix concentration \checkmark \checkmark Endotoxin concentration Ethanol concentration \checkmark ✓ Acetonitrile concentration Radionuclidic identity (half-life) \checkmark \checkmark Radioactivity concentration \checkmark Radiochemical identity (98 cm) Kit B: Reagent Set ✓ Radiochemical purity 38.5" (**Pipetting Tips** . TRACEABILITY Kit A: Analysis Plate TRACEABILITY. EABILITY. -26.3" (67 cm) Tracer-QC 13" (34 cm)

The Process

1. Add the sample and consumables

User installs a set of consumables and adds the product sample.



3. Tracer-QC Robot mixes and dispenses the sample

The pipetting robot mixes the sample with specific reagents and dispenses them to the analysis plate.



5. Analysis complete

After approximately 30 minutes the analysis is complete.

றி ⊕ Test	ing					racer-(⊋C″	LabLogic
etails								Stop
Batch Ref.	FDG_QC_2016_11_01_01	Start	01 A	ug 2016 @ 15:23:00	Duration:	00:10:00		зюр
Cassette Ref:	Sample_0008	End	01 A	ug 2016 @ 15:23:00	Time remaining:	00:10:00		
tatus								
Appearance (Co	alor)	Colorless	PASS	Radioactivity &		🕹 440 mG	imi PASS	
Appearance (C	larity)	Clear	PASS	Endotoxin	$\langle \hat{\gamma} \rangle$,	<175 EU	Imi PASS	
pН		5-7.5	PASS	Radiochemical Purity		>90%	PASS	
Kryptofix	••••	100 ugimi	PASS	Ethanol	•••	<500ppr	n PASS	
Radionuclidic Identitiy (Half L	ife)	n 105-115min	PASS	Acetonitrile	• . • •	ppm	PASS	
Super User	FDG Method details an	d configuration			37°C	11 Aug 2016	15:23:00	TRABILITY.

2. Initiate the analysis

User initiates the analysis using the software.



4. Tracer-QC Reader analyzes the optical signals

The reader then analyzes their optical characteristics against a set of predefined and validated reference specifications.



6. Collect the report

A single page report on up to 10 QC parameters is automatically printed or exported in the desired format.

	CER	TIFICATE O	F ANALYSIS				
Batch Number:	1062006	0000X					
Production Time	luction Time 05/25/2016 12:00 pm						
Analysis Time:	09/25/28	25/2835 5400 pm					
Expiration Time:	09/22/28	16 10:00 pm					
Variable		Specification	Result	PASS/FAIL			
Calor		Abs < 00 mAU 400 - 700 rm	Max.426 = 3 ± 0.3 mAU 405 mm	PA55			
Carlty		< 3550	< 1 a 0.3 N/U	PASS			
Radiochemical concern	tration	10-300 mG	42 ± 1 ± 0	PASS			
Radochemical purity		>90%	54%	PASS			
Radio Derrical Identity		R,=053±002	Ri = 0.52	PASS			
Radionacidic identity		T _{5.5} = 120 ± 5 min.	$T_{\rm cl} = 129 \pm 1~{\rm min}$	PASS			
Chemical Purity Ethan	d .	45	0.23 ± 0.02%	PASS			
Chemcial Purity Acets	nitele	+400 ppm	<20 ± 7 ppm	PASS			
Chencial Purity Xiyps	ek.	< 50 mps	<7 ± 2 mg/L	PASS			
pH .			6.4 ± 0.1	PASS			
Bacterial Endotoxin		+175 BUH	+0.3 ± 0.1 00/ml	PASS			
Filer knegity Test		> 50.psg					
Concubion: Baser Fluide	I on the abov oryglucose I	e analytical procedur 18 legetton is suitab	es, and in accordance with O e for intravenous administrati	t 252, this batch i in to human pabe			
QA/QC Officer				Name D			

- ✓ 1 Sample
- ✓ 1 Analytical Instrument
- ✓ 10 Tests
- 1 Traceable & Objective Report



About Trace-Ability Inc.

Trace-Ability is a growing, California-based company that answered the FDA call for modernization of testing technologies in radiopharmaceutical production. Years of experience in PET industry allowed the founders to recognize the opportunity to revolutionize and simplify PET-QC testing using optical techniques. The FDA funding and collaboration have enabled optimization and focused validation of Tracer-QC technology.



The LabLogic/Trace-Ability Partnership

Trace-Ability have focused on the technical aspects of bringing Tracer-QC to market, including development and validation of the core Tracer-QC technology and production of consumables.

LabLogic leveraged years of experience and expertise in software development, to create an intuitive software interface, built with FDA 21 CFR Part 11 (Electronic Signatures) and Part 212 (GMP) compliance in mind.

Commercialization of Tracer-QC is a joint effort.





Service and Support

Users of our systems can benefit from our comprehensive, fully inclusive service and support.

We provide complete service and support for all of our customers to give reassurance that if things go wrong or you need expert advice, help is only an e-mail or phone call away.



Validation Services

Our Validation Service enables you to implement and get maximum value from your investments as soon as possible.

We work as a partner with your Quality Manager, System Manager and users to provide a tailored Validation Plan suited to your needs. Our Validation Specialists incorporate years of experience in GLP system validation, detailed knowledge of our systems, together with other industry standard systems to help you meet your company's requirements.



Training

LabLogic can provide a variety of training courses and workshops to help you get the most out of your instrument and software.

All training is performed by our expert Product and Support Specialists who have many years experience in the development and use of the instruments and software.

Certificates can be provided to complement your internal GLP training records.

Related Products



Flow-RAM PET/SPECT radio-HPLC Detector



Bubble-Point[™]







EC-Detector PET/SPECT EC (Electrochemical) Detector







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