

SFHI EXTERNAL QUALITY CONTROL FOR CHIMERISM YEAR 2023

Laboratory name Jeta Molecular Laboratory Code 009
 Date issue 11/05/2023 Closing date 16/06/2023

Trial comment : 20 laboratories have participated in that exercise 2023 and sent 28 results : 24 performed with sensitive method such as quantitative PCR (16) or digital PCR (5) or NGS (3), and 4 performed with STR method.

Laboratories can participate for several methods.

Labs using q-PCR work with ABI7500 (5), Quant Studio (6) or Light Cycler (4), labs using ddPCR work with QX200 (3) or QIAcuity (1) and labs using NGS works with MiSeq (3). They use reagents from Biotype (3), Jeta Molecular (10), GenDx (5), Care DX (3) or in house (4). Labs using STR work with ABI3500 (2) or SeqStudio (2). They use reagents from Promega (3).

Sample comment : 15 samples were provided

Results and performance

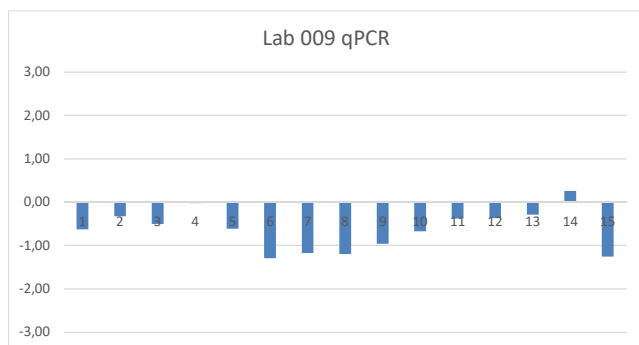
lab	009A							
method	qPCR							
machine	Q55							
reagent	Q Trace							
threshold	0,05%	mean	SD	M-2SD	M+2SD	M-1SD	M+1SD	median
23CH01	99,91	99,9	0,05	99,85	100,03	99,89	99,98	99,92
23CH02	99,66	99,7	0,07	99,54	99,83	99,61	99,76	99,70
23CH03	99,32	99,4	0,15	99,10	99,69	99,25	99,54	99,4
23CH04	99,85	99,9	0,06	99,73	99,97	99,79	99,91	99,85
23CH05	99,91	99,9	0,05	99,84	100,04	99,89	99,99	99,93
23CH06	92,86	94,0	0,88	92,24	95,75	93,12	94,87	93,72
23CH07	95,23	95,9	0,57	94,76	97,04	95,33	96,47	95,78
23CH08	95,28	95,9	0,55	94,84	97,04	95,39	96,49	95,86
23CH09	96,58	97,0	0,48	96,09	97,99	96,56	97,51	97
23CH10	90,59	91,4	1,17	89,04	93,71	90,21	92,54	91,28
23CH11	86,47	87,1	1,64	83,80	90,38	85,45	88,73	87,245
23CH12	72,87	73,8	2,44	68,89	78,66	71,33	76,22	74,07
23CH13	62,73	63,8	3,81	56,20	71,44	60,01	67,63	62,54
23CH14	82,59	82,2	1,57	79,03	85,32	80,61	83,75	82,11
23CH15	96,47	96,9	0,36	96,20	97,63	96,56	97,27	96,7

sample	reported % donor	z score	performance status
23CH01	99,91	-0,63	SATISFACTORY
23CH02	99,66	-0,33	SATISFACTORY
23CH03	99,32	-0,50	SATISFACTORY
23CH04	99,85	-0,02	SATISFACTORY
23CH05	99,91	-0,61	SATISFACTORY
23CH06	92,86	-1,29	SATISFACTORY
23CH07	95,23	-1,17	SATISFACTORY
23CH08	95,28	-1,19	SATISFACTORY
23CH09	96,58	-0,96	SATISFACTORY
23CH10	90,59	-0,67	SATISFACTORY
23CH11	86,47	-0,38	SATISFACTORY
23CH12	72,87	-0,37	SATISFACTORY
23CH13	62,73	-0,29	SATISFACTORY
23CH14	82,59	0,26	SATISFACTORY
23CH15	96,47	-1,25	SATISFACTORY

Z score is calculated for each sample :
 between -2 to 2 : satisfactory result
 Between -3 to -2 or 2 to 3 : need corrective action
 Below -3 or above 3 : critical result

Satisfactory	To Review	Critical
15	0	0

100%



Threshold for quantification 0,05%

Comment about threshold : Most of the labs used a threshold of 0,10% (11), Then 0,2% (1), 0,3% (4), 0,07% (1), 0,05% (3), 0,03% (1) and 1% (1).
 By STR, the threshold was validated at 2-5%

Date 01/07/2023 Visa VD / MA