

## Journal of Hepatology

### CTAT methods

Tables for a “Complete, Transparent, Accurate and Timely account” (CTAT) are now mandatory for all revised submissions. The aim is to enhance the reproducibility of methods.

- Only include the parts relevant to your study
- Refer to the CTAT in the main text as ‘Supplementary CTAT Table’
- Do not add subheadings
- Add as many rows as needed to include all information
- Only include one item per row

If the CTAT form is not relevant to your study, please outline the reasons why:

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### 1.1 Antibodies

Name	Citation	Supplier	Cat no.	Clone no.
ViaProbe	O'Brien MC <i>et al.</i> Cytometry. 1995; 19(3):243-255.	BD Biosciences (Franklin Lakes, NJ, USA)	555816(7-AAD)	N/A
anti-CD8	Kersh EN <i>et al.</i> J Exp Med. 1999; 190(11):1627-1636.	BD Biosciences (Franklin Lakes, NJ, USA)	555367(PE)	RPA-T8
anti-CD8	Engleman EG <i>et al.</i> J Exp Med. 1981;153:193-198.	BD Biosciences (Franklin Lakes, NJ, USA)	345775(APC)	SK1
anti-CD8	Knapp W. <i>et al.</i> Oxford New York: Oxford University Press; 1989; :1-1182	BD Biosciences (Franklin Lakes, NJ, USA)	562428(BV421)	RPA-T8
anti-IFN-γ	Alzona M <i>et al.</i> J Immunol. 1994;153:2861-2867.	BD Biosciences (Franklin Lakes, NJ, USA)	340449(FITC)	25723.11
anti-CD3	Thibault, G. <i>et al.</i> J. Immunol 1995; 154, 3814-3820,	Immunotech (Marseille, France)	IM1304	UCHT1
anti-CD28	Verwilghen J <i>et al.</i> J Immunol. 1993; 150(3):835-846.	BD Biosciences (Franklin Lakes, NJ, USA)	555726	N/A

### 1.2 Cell lines

Name	Citation	Supplier	Cat no.	Passage no.	Authentication test method
HEK293T ERAP1-/-	Reeves E <i>et al.</i> PNAS 2014; 111(49), 17594-17599	CRISPR ERAP1 knock-out generated in house.	N/A	5	STR profiling
B3Z T cell hybridoma	Reeves E <i>et al.</i> PNAS 2014; 111(49), 17594-17599	Nilabh Shastri, University of California at Berkeley	N/A	5	STR profiling

## 1.3 Organisms

No organisms/animals were used in this study.

## 1.4 Sequence based reagents

Name	Sequence	Supplier
HCV olps	HCV genome gt1a H77	BEI Resources (Manassas, VA, USA)
HCV Epitope Peptides	See Table S1, Fig.3, Fig.S1-S3, Table 2 rev.	Genaxxon bioscience GmbH (Ulm, Germany)
Primer E2 F1	TCCATGGTGGGGAAGTGGG	Thermo Fisher Scientific (Waltham, MA USA)
Primer E2 R1	CAGGAGAACGACGTAMTCCC	Thermo Fisher Scientific (Waltham, MA USA)
Primer E2 F2	AACACCAAYGGCAGTTG	Thermo Fisher Scientific (Waltham, MA USA)
Primer E2 R2	CCAGTTGAGTTCATCCAGG	Thermo Fisher Scientific (Waltham, MA USA)
Primer P7 F1	TGGTGGTGGGAACGACCG	Thermo Fisher Scientific (Waltham, MA USA)
Primer P7 R1	CCCACGTRATGAGCTTGG	Thermo Fisher Scientific (Waltham, MA USA)
Primer P7 F2	ATGTAYGTGGGAGGGGTCG	Thermo Fisher Scientific (Waltham, MA USA)
Primer P7 R2	TGRACGCGCACRAAGTAGGG	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A/B F1	CGCAATTACCTTGCGAGCC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A/B R1	TGCCTTTGGCAAGCACTGCG	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A/B F2	TCYGCTCCATCTCTCAAGGC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A/B R2	TYGACCMTGACCCGTCGC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.1 F1	CGTCTGCTCCTGCTTGTGG	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.1 R1	GAGGACCTTCCCCAGYCC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.1 F2	ATGTGGCCTCTCCTCCTGC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.1 R2	AGCACAGCCYGCATAGC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.2 F1	CGTCTGCTCCTGCTTGTGG	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.2 R1	GAGGACCTTCCCCAGYCC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.2 F2	CGAGGAGGTTGCTCTGTCC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS3.2 R2	AGGGCCTTCTGCTTGAAGTGC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A F1	TGAGCGGTGAGGTCCCCTCC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A R1	GAGGGATCAGTGAGCATGG	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A F2	TGGGACTGGATATGCGARG	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5A R2	GTGAAAAATTCGGGCGATGG	Thermo Fisher Scientific

		(Waltham, MA USA)
Primer NS5B F1	TATGAYACCCGCTGYTTYGACTC	Thermo Fisher Scientific (Waltham, MA USA)
Primer NS5B R1	GCTGTGATAWATGTCTCCCCCG	Thermo Fisher Scientific (Waltham, MA USA)
Primer ERAP1 F	GACGAATTCATGGTGTCTTCTGC CCCTCAAATG	Sigma-Aldrich Ltd (Gillingham, UK)
Primer ERAP1 R	GACCTCGAGCATCGTTCAAGC TTTTCAC	Sigma-Aldrich Ltd (Gillingham, UK)
Primer M13F	TGTAAAACGACGGCCAGT	SourceBioscience Ltd (Nottingham, UK)
Primer M13R	CAGGAAACAGCTATGACC	SourceBioscience Ltd (Nottingham, UK)
Primer ERAP1 seq	GGATGCTGCGGTGACTCTTCTAG	Sigma-Aldrich Ltd (Gillingham, UK)
Primer SRG F	CTTGCGGCAGTCTGCAGC GCGAGCCGTGGCAGCATC ATCAACTTCGAGCAC	Sigma-Aldrich Ltd (Gillingham, UK)
Primer SRG R	GTGCTCGAAGTTGATGATG CTGCCACGGCTCGCGCTG CAGACTGCCGCAAG	Sigma-Aldrich Ltd (Gillingham, UK)

## 1.5 Biological samples

Description	Source	Identifier
PBMC	HBUF Biobank University Hospital Freiburg	Patient ID
Plasma	HBUF Biobank University Hospital Freiburg	Patient ID

## 1.6 Deposited data

No data is deposited for this study.

## 1.7 Software

Software name	Manufacturer	Version
GraphPad Prism 6	GraphPad Software (La Jolla, CA, USA)	6
FlowJo	Treestar (Ashland, OR, USA)	10
BD FACSDiva	BD Biosciences (Franklin Lakes, NJ, USA)	8.0.1
Geneious	Biomatters Ltd. (Auckland, NZ)	11.0.5
DNADynamo	Blue Tractor Software Ltd, (North Wales, UK)	1

## 1.8 Other (e.g. drugs, proteins, vectors etc.)

Name	Supplier	Cat.No.
Interleukin-2	StemCell Technologies	78036.2
phorbol 12-myristate 13-acetate (PMA)	Sigma-Aldrich (Germany)	P8139
Ionomycin	Sigma-Aldrich (Germany)	I0634

GolgiPlug (Brefeldin A)	BD Biosciences (Franklin Lakes, NJ, USA)	555029
Phytohemagglutinin	Sigma-Aldrich (Germany)	L8902
Anti-CD8 Dynabeads	Invitrogen Life Technologies (Karlsruhe, Germany)	LS11147D
Streptavidin APC	PROzyme (Hayward, CA 94545)	PJ27S
Streptavidin PE	PROzyme (Hayward, CA 94545)	PJRS27
QIAamp Viral RNA Mini Kit	QIAGEN (Venlo, Netherlands)	52904
SuperScript™ III Reverse Transcriptase	Invitrogen (Germany)	18080044
GoTaq® Flexi DNA Polymerase	Promega (Madison, WI, USA)	M829
Roswell Park Memorial Institute (RPMI) 1640 medium	Thermo Fisher Scientific (Waltham, MA USA)	21875-034
fetal calf serum	ThermoFisher Scientific (Waltham, MA USA)	12657011
streptomycin/penicillin	Invitrogen Life Technologies (Karlsruhe, Germany)	15140122
HEPES buffer 1M	Thermo Fisher Scientific (Waltham, MA USA)	15630080
Dulbecco's Modified Eagles medium (DMEM)	Sigma-Aldrich (Poole, UK)	D5671
pcDNA3.1 mammalian expression vector	ThermoFisher Scientific (Waltham, MA USA)	V79020
Zero blunt TOPO PCR cloning vector	ThermoFisher Scientific (Waltham, MA USA)	450245
Fugene 6 transfection reagent	Promega (Southampton, UK)	E2691
One Shot Top 10 competent E.Coli	ThermoFisher Scientific (Waltham, MA USA)	C404006
KOD Hot Start DNA polymerase	Merck (Darmstadt, Germany)	71086
Human IFN-γ ELISpot Kit	Diaclone (Besancon Cedex, France)	856.051
Fixation/Permeabilization Solution Kit	BD Pharmingen (Heidelberg, Germany)	554714
Paraformaldehyde (PFA)	Sigma-Aldrich Chemie GmbH (Steinheim, Germany)	P6148

## 1.9 Please provide the details of the corresponding methods author for the manuscript:

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## 2.0 Please confirm for randomised controlled trials all versions of the clinical protocol are included in the submission. These will be published online as supplementary information.

No randomised controlled trials are included in this manuscript.